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CONNECTICUT GROUND WATER SURVEY

A PROJECT OF THE WORKS PROGRESS ADMINISTRATION

THE SALINITY OF THE CONNECTICUT RIVER AT SAYBROOK HIGHWAY BRIDGE

OCTOBER 1, 1937 TO SEPTEMBER 30, 1938

BULLETIN S-11

PREPARED BY

OFFICIAL PROJECT 665-15-3-116

WORKS PROGRESS ADMINISTRATION FOR CONNECTICUT

VINCENT J. SULLIVAN, ADMINISTRATOR

IN CO-OPERATION WITH AND UNDER THE DIRECTION OF THE

CONNECTICUT STATE WATER COMMISSION, SPONSOR

HARTFORD, CONNECTICUT

JUNE - - - 1939

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Connecticut Ground Water Survey

A Project of the Works Progress Administration

The Salinity of the Connecticut River at Saybrook Highway Bridge

October 1, 1937 to September 30, 1938

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Prepared by
Official Project 665-15-3-116
Works Progress Administration for Connecticut
Vincent J. Sullivan, Administrator

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Connecticut State Water Commission, Sponsor

Hartford, Connecticut
June, 1939

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Introduction

Supplementing Bulletin S1, Parts II and III, this report presents in tabulated form the chloride determinations of samples of water taken from the Connecticut River at the Saybrook Highway Bridge from October 1, 1937 to September 30, 1938, inclusive. These tabulations, together with others covering different locations and periods of time, form a major part of the results of a study of the salinity of tidal streams, which has been carried on since October 1934.

This study was undertaken at the suggestion of General Sanford H. Wadhams, Director of the Connecticut State Water Commission, as a part of the State's program of water resources studies under the Federal work program. The work has been a function of the Connecticut Ground Water Survey, now operating as Works Progress Administration Official Project 665-15-3-116, sponsored by the State Water Commission. The Geological Survey, United States Department of the Interior, was freely consulted regarding the field work. The Connecticut Ground Water Survey was organized as a Federal Emergency Relief Administration Project on October 1, 1934 by the Connecticut State Emergency Relief Commission, under sponsorship of the State Planning Board in co-operation with the State Water Commission. It continued on this basis until November 22, 1935, when it was taken over by the Works Progress Administration. Since that time it has been operated by the Division of Professional and Service Projects of the Works Progress Administration for Connecticut as Official Projects 65-15-861, 465-15-3-26, 665-15-3-116. The Connecticut State Planning Board in co-operation with the State Water Commission sponsored the program until July 1, 1937, when sponsorship was assumed by the State Water Commission. William H. Brothwell, Project Supervisor for the Works Progress Administration, also supervised the earlier work performed under the State Emergency Relief Commission and has been in charge of the Sponsor's program throughout. This investigation of sea-water intrusion has been facilitated by the close co-operation among the various agencies interested in the problem.

The work reported upon here was planned and carried out under the direction of the State Water Commission. Mr. Brothwell was in charge of the personnel and facilities and co-ordinated the various parts of the work. The engineering staff of the State Water Commission assisted in transporting samples and in other phases of the work. The field work and collection of water samples were under the supervision of Fred W. Carter. The chloride determinations were made at the Hall Laboratory of Chemistry of Wesleyan University under direct supervision of Arthur McDonald, with Professor C. R. Hoover of the Department of Chemistry of the university acting in an advisory capacity. The tabulations presented in this report were made under the direct supervision of Robert Tilden. Stencilling, reproduction and assembly of the report were in charge of Winthrop E. Danielson.

The assistance and co-operation of Mr. V. J. Sullivan, Administrator of the Works Progress Administration, and of the staff of the Professional and Service Division under whose direct supervision the work was accomplished, is gratefully acknowledged. The co-operation of the United States Geological Survey is also greatly appreciated.

Investigations

The work of collecting samples at the Saybrook Highway Bridge was carried on daily by crews especially trained for this work. In addition to the regular scheduled program of sampling at this point, several other types of studies were made. They are:-

Special study No. 23. Samples were taken daily at 15-minute intervals during a period of from 3½ to 5 hours from March 27, 1938, to approximately two months later.

Special study No. 25. Staff gage readings were taken at 5-minute intervals at Station 9A from a half-hour before low high tide to a half-hour afterward. Six bottom samples[1] were collected at one-minute intervals, the first of which was taken fifteen minutes after the last high tide observation. This type of sampling was carried on from October 1, 1937, to December 20, 1937, inclusive, and from June 8, 1938, to July 5, 1938, inclusive. From July 6, 1938, to September 30, 1938, three samples (surface, mid-depth, and bottom) were taken daily instead of the six bottom samples.

Special study No. 101. Samples at 3 depths (surface, mid-depth, and bottom) were taken from shore at Station 12A at time of high slack water.

Special study No. 201. Same samples as in No. 101 but following low slack water at Station 12A.

The purpose of the sampling at the Saybrook Highway Bridge and other designated sections and stations on the lower Connecticut River was to investigate the effect of height of tide and river discharge on chloride concentration.

This report does not include statements as to the detail of the work or methods used; those are fully described in Bulletin S1*, Part I.

Summary of Work 1937-1938

Approximately 36,000 samples of river water were obtained from 31 stations at 16 sections on the lower Connecticut River. Of these, the chloride determinations of 9,800 samples are presented in this report.

Several types of sampling programs, each designed to develop some specific data, were devised and used at various times. The various programs and schedules of operations were arranged by this Survey. Detailed operating schedules for sampling at the designated sections and stations were drawn up in the field with close attention to river conditions. Close cooperation between the laboratory and field units made it possible to operate with a high degree of flexibility. The samples were transported to the laboratory at frequent intervals for chloride determinations, and the results were subsequently forwarded to the Hartford office for recording and study.

The following pages present the tabulations as mentioned in the foregoing paragraphs.

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1 The tabulations of those samples are presented separately on pp 187-192 of this report.

* "THE SALINITY OF THE CONNECTICUT RIVER, OCTOBER 1, 1934 to SEPTEMBER 30, 1937"

Location of sampling section at

SAYBROOK HIGHWAY BRIDGE

on the Connecticut River

Chloride in samples collected from the
Connecticut River at the Saybrook Highway Bridge,
Saybrook Conn. from October 1, 1937 to September 30, 1938

Table 1 Tide cycle: one hour before to high tide

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Nov. 16 (a)	Surface		7			
7:24AM	Mid-depth		7			
	Bottom		7			
(a)	Surface		7			
7:34AM	Mid-depth		7			
	Bottom		9			
(a)	Surface		7			
7:44AM	Mid-depth		5			
	Bottom		7			

Note: The sub-letters appearing after the date indicates that more than one set of samples were taken on that day and denotes the particular type of study as shown in the following:-

(a) Regular and Special Studies taken from Saybrook Highway Bridge.

(b) Samples taken from shore at high tide.

(c) Samples taken from shore at low tide.

(d) Samples taken from shore at high slack water.

(e) Samples taken from shore at low slack water.

(f) Special Study at Persson's Dock.

The time appearing before each group of samples is Eastern Standard Time. The time shown for each group applies to station 9. When no tabulation of samples is shown in the group for station 9, the time then applies to the lowest station number of the group.

(9A) Station 9A is located on a platform at a point approximately 20 feet east and 4 feet south of station 9.

(12A) Station 12A is known as "Persson's Dock," 100 feet north of Saybrook Bridge, and approximately on line with station 12 on the bridge.

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 16 (a) 7:54AM	Surface		5			
	Mid-depth		7			
	Bottom		7			
(a) 8:04AM	Surface		7			
	Mid-depth		7			
	Bottom		5			
(a) 8:14AM	Surface		5			
	Mid-depth		7			
	Bottom		5			
Nov. 17 (a) 8:11AM	Surface		11			
	Mid-depth		307			
	Bottom		1,120			
(a) 8:26AM	Surface		165			
	Mid-depth		142			
	Bottom		6,200			
(a) 8:41AM	Surface		46			
	Mid-depth		155			
	Bottom		840			
(a) 8:56AM	Surface		22			
	Mid-depth		2,860			
	Bottom		9,300			
Nov. 18 (a) 9:00AM	Surface		9			
	Mid-depth		9			
	Bottom		9			
(a) 9:15AM	Surface		71			
	Mid-depth		460			
	Bottom		6,700			
(a) 9:30AM	Surface		257			
	Mid-depth		2,300			
	Bottom		7,100			
(a) 9:45AM	Surface		107			
	Mid-depth		1,020			
	Bottom		4,200			
(a) 10:00AM	Surface		83			
	Mid-depth		109			
	Bottom		4,100			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12.
1937						
Nov. 18 (a) 9:45PM	Surface		9			
	Mid-depth		7			
	Bottom		7			
(a) 10:00PM	Surface		8			
	Mid-depth		5			
	Bottom		400			
(a) 10:15PM	Surface		9			
	Mid-depth		7			
	Bottom		11			
(a) 10:30PM	Surface		7			
	Mid-depth		11			
	Bottom		3,480			
Nov. 19 (a) 10:00AM	Surface		21			
	Mid-depth		350			
	Bottom		260			
(a) 10:15AM	Surface		23			
	Mid-depth		240			
	Bottom		95			
(a) 10:30AM	Surface		25			
	Mid-depth		260			
	Bottom		320			
(a) 10:45AM	Surface		25			
	Mid-depth		320			
	Bottom		340			
Nov. 20 (a) 10:45AM	Surface		165			
	Mid-depth		5,750			
	Bottom		7,550			
(a) 11:00AM	Surface		1,500			
	Mid-depth		10,400			
	Bottom		11,150			
(a) 11:15AM	Surface		3,200			
	Mid-depth		9,800			
	Bottom		10,750			
(a) 11:30AM	Surface		4,250			
	Mid-depth		10,600			
	Bottom		10,750			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 21 (a) 11:45AM	Surface		550			
	Mid-depth		4,900			
	Bottom		9,850			
(a) 12:00AM	Surface		600			
	Mid-depth		7,200			
	Bottom		11,600			
(a) 12:15PM	Surface		240			
	Mid-depth		3,200			
	Bottom		13,000			
(a) 12:30PM	Surface		310			
	Mid-depth		9,900			
	Bottom		12,550			
Nov. 22 (a) 12:45PM	Surface		21			
	Mid-depth		39			
	Bottom		39			
(a) 1:00PM	Surface		23			
	Mid-depth		39			
	Bottom		46			
(a) 1:15PM	Surface		235			
	Mid-depth		9,300			
	Bottom		10,200			
(a) 1:30PM	Surface		260			
	Mid-depth		2,400			
	Bottom		9,200			
Nov. 23 (a) 1:45PM	Surface		165			
	Mid-depth		3,700			
	Bottom		5,250			
(a) 2:00PM	Surface		720			
	Mid-depth		5,300			
	Bottom		8,550			
(a) 2:15PM	Surface		1,020			
	Mid-depth		3,300			
	Bottom		8,800			
(a) 2:30PM	Surface		1,000			
	Mid-depth		5,000			
	Bottom		8,800			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 26 (a) 4:30AM	Surface		1,880			
	Mid-depth		1,580			
	Bottom		9,700			
(a) 4:45AM	Surface		1,900			
	Mid-depth		9,700			
	Bottom		9,400			
(a) 5:00AM	Surface		1,240			
	Mid-depth		9,100			
	Bottom		9,900			
(a) 5:15AM	Surface		2,160			
	Mid-depth		9,000			
	Bottom		8,710			
Nov. 27 (a) 5:30AM	Surface		8,800			
	Mid-depth		10,600			
	Bottom		11,100			
(a) 5:45AM	Surface		5,900			
	Mid-depth		11,000			
	Bottom		11,000			
(a) 6:00AM	Surface		8,500			
	Mid-depth		11,500			
	Bottom		11,200			
(a) 6:15AM	Surface		4,850			
	Mid-depth		11,500			
	Bottom		11,300			
Nov. 29 (a) 7:00AM	Surface		7			
	Mid-depth		7			
	Bottom		7			
(a) 7:15AM	Surface		7			
	Mid-depth		7			
	Bottom		7			
(a) 7:30AM	Surface		9			
	Mid-depth		7			
	Bottom		7			
(a) 7:45AM	Surface		9			
	Mid-depth		5			
	Bottom		7			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 30 (a) 7:45AM	Surface		5			
	Mid-depth		3			
	Bottom		5			
(a) 8:00AM	Surface		7			
	Mid-depth		9			
	Bottom		6			
(a) 8:15AM	Surface		5			
	Mid-depth		5			
	Bottom		6			
(a) 8:30AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
Dec. 1 (a) 8:30AM	Surface		7			
	Mid-depth		5			
	Bottom		5			
(a) 8:45AM	Surface		7			
	Mid-depth		11			
	Bottom		3			
(a) 9:00AM	Surface		5			
	Mid-depth		3			
	Bottom		7			
(a) 9:15AM	Surface		3			
	Mid-depth		7			
	Bottom		5			
Dec. 2 (a) 9:15AM	Surface		7			
	Mid-depth		5			
	Bottom		5			
(a) 9:30AM	Surface		5			
	Mid-depth		5			
	Bottom		3			
(a) 9:45AM	Surface		3			
	Mid-depth		5			
	Bottom		7			
(a) 10:00AM	Surface		5			
	Mid-depth		-			
	Bottom		.			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 3 (a) 9:45AM	Surface		6			
	Mid-depth		380			
	Bottom		880			
(a) 10:00AM	Surface		13			
	Mid-depth		580			
	Bottom		4,400			
(a) 10:15AM	Surface		15			
	Mid-depth		3,900			
	Bottom		7,800			
(a) 10:30AM	Surface		13			
	Mid-depth		71			
	Bottom		10,300			
Dec. 4 (a) 11:15AM	Surface		78			
	Mid-depth		1,720			
	Bottom		7,250			
(a) 11:30AM	Surface		300			
	Mid-depth		6,850			
	Bottom		9,500			
(a) 11:45AM	Surface		220			
	Mid-depth		4,300			
	Bottom		8,000			
(a) 12:00AM	Surface		125			
	Mid-depth		6,650			
	Bottom		8,600			
(a) 12:15PM	Surface		290			
	Mid-depth		7,950			
	Bottom		9,350			
Dec. 5 (a) 11:00AM	Surface		23			
	Mid-depth		6,050			
	Bottom		8,100			
(a) 11:15AM	Surface		210			
	Mid-depth		5,150			
	Bottom		10,150			
(a) 11:30AM	Surface		63			
	Mid-depth		4,700			
	Bottom		10,650			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1937						
Dec. 5 (a) 11:45AM	Surface		93			
	Mid-depth		7,300			
	Bottom		12,000			
Dec. 6 (a) 11:45AM	Surface		200			
	Mid-depth		6,700			
	Bottom		10,500			
(a) 12:00AM	Surface		340			
	Mid-depth		6,100			
	Bottom		11,700			
(a) 12:15PM	Surface		300			
	Mid-depth		4,900			
	Bottom		10,900			
(a) 12:30PM	Surface		360			
	Mid-depth		6,300			
	Bottom		11,000			
Dec. 7 (a) 12:30PM	Surface		14			
	Mid-depth		18			
	Bottom		139			
(a) 12:45PM	Surface		16			
	Mid-depth		90			
	Bottom		127			
(a) 1:00PM	Surface		15			
	Mid-depth		73			
	Bottom		161			
(a) 1:15PM	Surface		7			
	Mid-depth		105			
	Bottom		95			
Dec. 8 (a) 1:30PM	Surface		35			
	Mid-depth		33			
	Bottom		1,280			
(a) 1:30PM	Surface		33			
	Mid-depth		39			
	Bottom		640			
(a) 1:45PM	Surface		33			
	Mid-depth		81			
	Bottom		1,380			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1937						
Dec. 8 (a) 2:00PM	Surface		25			
	Mid-depth		31			
	Bottom		25			
Dec. 9 (a) 2:00PM	Surface		7			
	Mid-depth		7			
	Bottom		7			
(a) 2:15PM	Surface		9			
	Mid-depth		9			
	Bottom		600			
(a) 2:30PM	Surface		9			
	Mid-depth		11			
	Bottom		520			
(a) 2:45PM	Surface		9			
	Mid-depth		8			
	Bottom		3,400			
Dec. 10 (a) 3:00PM	Surface		49			
	Mid-depth		480			
	Bottom		2,240			
(a) 3:15PM	Surface		45			
	Mid-depth		127			
	Bottom		2,180			
(a) 3:30PM	Surface		19			
	Mid-depth		1,060			
	Bottom		8,150			
(a) 3:45PM	Surface		17			
	Mid-depth		5,200			
	Bottom		6,800			
Dec. 13 (a) 5:15AM	Surface		1,180			
	Mid-depth		11,400			
	Bottom		11,700			
(a) 5:30AM	Surface		1,620			
	Mid-depth		11,200			
	Bottom		11,300			
(a) 5:45AM	Surface		1,560			
	Mid-depth		10,900			
	Bottom		11,200			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1937						
Dec. 13 (a)	Surface		3,540			
6:00AM	Mid-depth		10,700			
	Bottom		10,600			
Dec. 14 (a)	Surface		920			
6:15AM	Mid-depth		12,900			
	Bottom		13,200			
(a)	Surface		2,900			
6:30AM	Mid-depth		12,900			
	Bottom		13,000			
(a)	Surface		6,900			
6:45AM	Mid-depth		13,000			
	Bottom		10,900			
(a)	Surface		800			
7:00AM	Mid-depth		11,600			
	Bottom		13,100			
Dec. 15 (a)	Surface		3,300			
7:00AM	Mid-depth		8,500			
	Bottom		10,000			
(a)	Surface		4,600			
7:15AM	Mid-depth		13,800			
	Bottom		10,000			
(a)	Surface		6,900			
7:30AM	Mid-depth		12,200			
	Bottom		14,200			
(a)	Surface		4,700			
7:45AM	Mid-depth		13,000			
	Bottom		14,800			
(a)	Surface		4,700			
8:00AM	Mid-depth		12,400			
	Bottom		14,700			
Dec. 16 (a)	Surface		12,400			
8:00AM	Mid-depth		13,300			
	Bottom		13,600			
(a)	Surface		12,200			
8:15AM	Mid-depth		12,700			
	Bottom		13,200			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 16 (a) 8:30AM	Surface		11,300			
	Mid-depth		12,500			
	Bottom		14,000			
(a) 8:45AM	Surface		11,100			
	Mid-depth		12,200			
	Bottom		13,100			
Dec. 17 (a) 8:45AM	Surface		6,500			
	Mid-depth		13,500			
	Bottom		13,600			
(a) 9:00AM	Surface		7,100			
	Mid-depth		13,500			
	Bottom		14,800			
(a) 9:15AM	Surface		7,100			
	Mid-depth		13,200			
	Bottom		14,200			
(a) 9:30AM	Surface		8,000			
	Mid-depth		14,200			
	Bottom		15,200			
Dec. 18 (a) 9:45AM	Surface		7,200			
	Mid-depth		12,500			
	Bottom		11,300			
(a) 10:00AM	Surface		6,700			
	Mid-depth		12,400			
	Bottom		13,000			
(a) 10:15AM	Surface		5,100			
	Mid-depth		13,400			
	Bottom		13,900			
(a) 10:30AM	Surface		11,600			
	Mid-depth		12,900			
	Bottom		12,800			
Dec. 20 (a) 11:30AM	Surface		65			
	Mid-depth		5,300			
	Bottom		8,100			
(a) 11:45AM	Surface		99			
	Mid-depth		7,100			
	Bottom		10,150			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1937						
Dec. 20 (a) 12:00AM	Surface		167			
	Mid-depth		8,300			
	Bottom		11,500			
(a) 12:15PM	Surface		171			
	Mid-depth		9,200			
	Bottom		12,600			
Dec. 24 (a) 3:15PM	Surface		940			
	Mid-depth		8,300			
	Bottom		8,200			
(a) 3:30PM	Surface		720			
	Mid-depth		8,100			
	Bottom		9,500			
(a) 3:45PM	Surface		8,400			
	Mid-depth		11,500			
	Bottom		11,800			
(a) 4:00PM	Surface		3,400			
	Mid-depth		11,200			
	Bottom		11,200			
Dec. 28 (a) 6:35AM	Surface	2,150	11,200		5,200	
	Mid-depth	11,200	12,700		11,100	
	Bottom	12,600	11,700		8,400	
7:30AM	Surface				8,700	
	Mid-depth				13,900	
	Bottom				14,000	
Dec. 29 7:55AM	Surface	2,800	2,900		1,900	
	Mid-depth	8,300	8,500		5,500	
	Bottom	8,800	9,500		8,500	
Dec. 30 8:36AM	Surface	2,400	2,100		2,300	
	Mid-depth	9,700	6,900		6,600	
	Bottom	10,800	9,400		10,200	
Dec. 31 9:15AM	Surface	3,800	5,100		1,800	
	Mid-depth	10,700	9,600		10,500	
	Bottom	11,700	10,800		10,700	

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Jan. 1	Surface	13,100	5,900		3,800	
9:55AM	Mid-depth	14,700	15,400		14,700	
	Bottom	15,600	15,200		15,100	
Jan. 2	Surface	9,100	9,100		8,600	
10:25AM	Mid-depth	14,100	13,600		8,900	
	Bottom	14,400	13,400		13,400	
Jan. 3	Surface	9,000	8,700		5,100	
11:05AM	Mid-depth	10,200	11,200		10,900	
	Bottom	11,900	12,500		11,900	
Jan. 4	Surface	3,100	2,700		10,300	
11:45AM	Mid-depth	11,200	10,600		2,600	
	Bottom	10,900	11,700		11,800	
Jan. 5 (a)	Surface		3,700			
12:20PM	Mid-depth		13,000			
	Bottom		12,300			
(a)	Surface	2,300			2,400	
12:25PM	Mid-depth	9,700			13,100	
	Bottom	11,900			13,900	
Jan. 6	Surface	3,300	1,100		920	
1:05PM	Mid-depth	8,900	8,200		8,100	
	Bottom	10,200	9,300		10,200	
Jan. 7	Surface	2,020	2,240		1,720	
1:50PM	Mid-depth	3,500	3,550		6,000	
	Bottom	3,950	8,300		8,400	
Jan. 12	Surface	5,700	4,800		6,100	
6:19AM	Mid-depth	12,700	12,300		11,900	
	Bottom	12,700	13,700		13,200	
Jan. 13	Surface	12,500	9,000		12,300	
7:25AM	Mid-depth	12,300	11,000		12,100	
	Bottom	13,600	14,000		14,050	
Jan. 14 (a)	Surface		6,300			
7:40AM	Mid-depth		13,400			
	Bottom		14,600			
(a)	Surface		6,100			
7:50AM	Mid-depth		15,000			
	Bottom		14,600			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 14 (a) 8:00AM	Surface		7,800			
	Mid-depth		14,100			
	Bottom		14,500			
(a) 8:10AM	Surface		7,200			
	Mid-depth		15,100			
	Bottom		15,400			
(a) 8:20AM	Surface		6,500			
	Mid-depth		14,900			
	Bottom		15,100			
(a) 8:30AM	Surface		6,400			
	Mid-depth		13,900			
	Bottom		14,400			
Jan. 15 (a) 8:40AM	Surface		4,400			
	Mid-depth		13,700			
	Bottom		14,150			
(a) 8:50AM	Surface		3,450			
	Mid-depth		14,050			
	Bottom		14,400			
(a) 9:00AM	Surface		3,150			
	Mid-depth		14,500			
	Bottom		14,750			
(a) 9:10AM	Surface		3,150			
	Mid-depth		14,800			
	Bottom		14,850			
(a) 9:20AM	Surface		3,050			
	Mid-depth		14,750			
	Bottom		15,000			
(a) 9:30AM	Surface		3,100			
	Mid-depth		15,000			
	Bottom		15,300			
Jan. 16 (a) 9:30AM	Surface		2,800			
	Mid-depth		12,800			
	Bottom		12,300			
(a) 9:40AM	Surface		2,500			
	Mid-depth		12,900			
	Bottom		12,150			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 16 (a) 9:50AM	Surface		5,250			
	Mid-depth		13,200			
	Bottom		12,950			
(a) 10:00AM	Surface		4,250			
	Mid-depth		13,600			
	Bottom		13,050			
(a) 10:10AM	Surface		3,750			
	Mid-depth		13,250			
	Bottom		13,500			
(a) 10:20AM	Surface		6,850			
	Mid-depth		11,600			
	Bottom		13,300			
Jan. 17 (a) 10:20AM	Surface		5,600			
	Mid-depth		11,600			
	Bottom		12,200			
(a) 10:30AM	Surface		4,900			
	Mid-depth		12,800			
	Bottom		13,600			
(a) 10:40AM	Surface		5,400			
	Mid-depth		11,200			
	Bottom		13,350			
(a) 10:50AM	Surface		11,900			
	Mid-depth		13,700			
	Bottom		14,250			
(a) 11:00AM	Surface		3,800			
	Mid-depth		14,200			
	Bottom		14,000			
(a) 11:10AM	Surface		4,150			
	Mid-depth		14,000			
	Bottom		15,100			
Jan. 18 (a) 11:10AM	Surface		3,700			
	Mid-depth		9,900			
	Bottom		11,600			
(a) 11:20AM	Surface		3,200			
	Mid-depth		12,200			
	Bottom		12,600			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 18 (a)	Surface		2,700			
11:30AM	Mid-depth		12,800			
	Bottom		13,100			
(a)	Surface		3,600			
11:40AM	Mid-depth		12,500			
	Bottom		13,200			
(a)	Surface		3,700			
11:50AM	Mid-depth		11,000			
	Bottom		14,000			
(a)	Surface		3,600			
12:00AM	Mid-depth		13,400			
	Bottom		14,000			
Jan. 19 (a)	Surface		2,750			
12:00AM	Mid-depth		9,700			
	Bottom		10,700			
(a)	Surface		3,850			
12:15PM	Mid-depth		8,100			
	Bottom		12,100			
(a)	Surface		3,800			
12:30PM	Mid-depth		10,200			
	Bottom		12,500			
(a)	Surface		5,200			
12:45PM	Mid-depth		12,700			
	Bottom		12,600			
Jan. 20 (a)	Surface		1,500			
1:00PM	Mid-depth		9,000			
	Bottom		10,200			
(a)	Surface		1,000			
1:15PM	Mid-depth		7,950			
	Bottom		9,950			
(a)	Surface		1,900			
1:30PM	Mid-depth		9,050			
	Bottom		10,800			
Jan. 21 (a)	Surface		1,100			
1:45PM	Mid-depth		9,500			
	Bottom		11,700			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 21 (f) 1:57PM (12A)	Surface					720
	Mid-depth					9,100
	Bottom					11,500
(f) 2:12PM (12A)	Surface					880
	Mid-depth					7,850
	Bottom					9,650
(f) 2:27PM (12A)	Surface					700
	Mid-depth					8,900
	Bottom					8,150
Jan. 22 (f) 2:54PM (12A)	Surface					970
	Mid-depth					11,800
	Bottom					13,000
(f) 3:09PM (12A)	Surface					1,060
	Mid-depth					12,100
	Bottom					13,200
(f) 3:24PM (12A)	Surface					1,030
	Mid-depth					9,700
	Bottom					13,450
Jan. 26 7:00AM	Surface		7			
	Mid-depth		6			
	Bottom		7			
Jan. 27 (a) 7:00AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 7:15AM	Surface		7			
	Mid-depth		5			
	Bottom		5			
(a) 7:30AM	Surface		4			
	Mid-depth		6			
	Bottom		5			
(a) 7:45AM	Surface		6			
	Mid-depth		4			
	Bottom		3			
Jan. 31 10:10AM	Surface	11	9		6	
	Mid-depth	14	5		7	
	Bottom	14	11		6	

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 1 10:45AM	Surface	5	5		7	
	Mid-depth	3	9		7	
	Bottom	3	7		1,550	
Feb. 2 (a) 11:00AM	Surface		9			
	Mid-depth		87			
	Bottom		860			
(a) 11:15AM	Surface		13			
	Mid-depth		4,100			
	Bottom		8,600			
(a) 11:30AM	Surface		11			
	Mid-depth		8,000			
	Bottom		10,100			
(a) 11:45AM	Surface		27			
	Mid-depth		2,900			
	Bottom		11,100			
Feb. 3 (a) 11:30AM	Surface		37			
	Mid-depth		45			
	Bottom		34			
(a) 11:45AM	Surface		38			
	Mid-depth		1,220			
	Bottom		3,600			
(a) 12:00AM	Surface		47			
	Mid-depth		4,100			
	Bottom		4,800			
(a) 12:15PM	Surface		41			
	Mid-depth		5,900			
	Bottom		10,350			
Feb. 4 (a) 12:35PM	Surface	4	5		7	
	Mid-depth	7	4		5	
	Bottom	6,150	5		6	
(a) 12:15PM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 12:30PM	Surface		3			
	Mid-depth		5			
	Bottom		8			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Feb. 4 (a) 12:45PM	Surface		5			
	Mid-depth		9			
	Bottom		14			
(a) 1:00PM	Surface		3			
	Mid-depth		9			
	Bottom		3,700			
Feb. 6 2:05PM	Surface	19	19		15	
	Mid-depth	880	920		3,850	
	Bottom	4,150	4,000		3,600	
Feb. 7 3:05PM	Surface	5	5		10	
	Mid-depth	7	7		7	
	Bottom	7	5		5	
Feb. 8 4:05PM	Surface	5	6		6	
	Mid-depth	3	6		7	
	Bottom	7	9		35	
Feb. 16 11:30AM	Surface	17	13		13	
	Mid-depth	107	1,800		520	
	Bottom	10,700	10,900		8,600	
Feb. 18 12:54PM	Surface	37	15		17	
	Mid-depth	440	2,900		19	
	Bottom	7,700	6,900		6,250	
Feb. 19 1:35PM	Surface	151	350		57	
	Mid-depth	9,600	4,800		1,700	
	Bottom	10,550	9,450		9,400	
Feb. 20 (a) 2:15PM	Surface		860			
	Mid-depth		10,200			
	Bottom		11,600			
(a) 2:30PM	Surface		800			
	Mid-depth		11,000			
	Bottom		12,700			
(a) 2:45PM	Surface		900			
	Mid-depth		12,050			
	Bottom		13,050			
(a) 3:00PM	Surface		1,260			
	Mid-depth		12,100			
	Bottom		13,300			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 25 (a) 6:30AM	Surface		2,300			
	Mid-depth		11,600			
	Bottom		13,600			
(a) 6:45AM	Surface		2,000			
	Mid-depth		12,000			
	Bottom		13,800			
(a) 6:57AM	Surface		2,100		1,100	
	Mid-depth		12,600		11,900	
	Bottom		13,700		11,600	
(a) 7:00AM	Surface		2,200			
	Mid-depth		13,600			
	Bottom		14,050			
(a) 7:15AM	Surface	2,900	1,900			
	Mid-depth	13,800	13,000			
	Bottom	12,900	13,650			
Feb. 26 (a) 7:15AM	Surface		1,300			
	Mid-depth		12,000			
	Bottom		12,300			
(a) 7:30AM	Surface		1,440			
	Mid-depth		11,800			
	Bottom		12,700			
(a) 7:45AM	Surface		1,290			
	Mid-depth		12,400			
	Bottom		12,600			
(a) 7:50AM	Surface	1,500	1,400		2,100	
	Mid-depth	11,700	8,300		12,400	
	Bottom	12,400	13,000		13,100	
(a) 8:00AM	Surface		1,930			
	Mid-depth		12,600			
	Bottom		13,150			
Feb. 27 (a) 8:00AM	Surface		1,430			
	Mid-depth		8,450			
	Bottom		11,700			
(a) 8:15AM	Surface		1,140			
	Mid-depth		11,100			
	Bottom		11,600			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Feb. 27 (a) 8:25AM	Surface	1,900	2,050		1,050	
	Mid-depth	11,000	7,850		12,650	
	Bottom	10,800	10,000		12,900	
(a) 8:30AM	Surface		1,360			
	Mid-depth		10,750			
	Bottom		12,000			
(a) 8:45AM	Surface		1,380			
	Mid-depth		11,250			
	Bottom		12,200			
Mar. 2 10:20AM	Surface	1,700	1,900		2,100	
	Mid-depth	5,900	6,900		5,700	
	Bottom	3,900	6,000		8,500	
Mar. 3 10:55AM	Surface	1,100	1,300		800	
	Mid-depth	10,100	9,400		10,500	
	Bottom	13,500	12,300		13,500	
Mar. 4 11:35AM	Surface	1,340	1,300		1,200	
	Mid-depth	10,800	7,600		9,600	
	Bottom	13,900	14,000		9,000	
Mar. 5 12:20PM	Surface	1,300	1,200		1,340	
	Mid-depth	11,700	11,200		12,400	
	Bottom	13,200	12,800		12,600	
Mar. 13 8:10AM	Surface				1,950	
	Mid-depth				13,650	
	Bottom				11,950	
Mar. 14 8:39AM	Surface	1,000	3,850		660	
	Mid-depth	11,100	8,700		8,950	
	Bottom	12,750	11,850		11,600	
Mar. 15 9:27AM	Surface	7,400	3,800		2,250	
	Mid-depth	12,900	11,700		12,400	
	Bottom	14,400	13,400		14,200	
Mar. 16 10:13AM	Surface	460	350		300	
	Mid-depth	10,850	9,100		7,600	
	Bottom	12,350	11,000		11,200	
Mar. 17 11:00AM	Surface	1,090	1,690		910	
	Mid-depth	13,250	11,950		13,250	
	Bottom	14,150	13,050		13,700	

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Mar. 18	Surface	900	1,000		700	
11:42AM	Mid-depth	8,900	9,350		9,450	
	Bottom	10,100	9,300		8,850	
Mar. 19	Surface	22	41		21	
12:25PM	Mid-depth	11,150	4,300		1,250	
	Bottom	12,000	10,900		11,000	
Mar. 21	Surface	84	65	34	27	15
2:00PM	Mid-depth	3,500	1,700	1,300	230	28
	Bottom	11,300	10,300	8,150	10,300	1,150
Mar. 22	Surface	9	6	9	11	10
3:00PM	Mid-depth	8,850	1,400	24	20	10
	Bottom	10,900	9,700	3,800	10,500	440
Mar. 26	Surface	2	7	3	1	3
6:27AM	Mid-depth	3	3	2	3	5
	Bottom	3	4	3	4	7
Mar. 27 (a)	Surface		1			
6:45AM	Mid-depth		1			
	Bottom		3			
(a)	Surface		1			
7:00AM	Mid-depth		1			
	Bottom		3			
(a)	Surface		1			
7:15AM	Mid-depth		2			
	Bottom		3			
(a)	Surface		2			
7:30AM	Mid-depth		1			
	Bottom		2			
Mar. 29 (a)	Surface		1			
8:00AM	Mid-depth		1			
	Bottom		4			
(a)	Surface		2			
8:15AM	Mid-depth		3			
	Bottom		2			
(a)	Surface		2			
8:30AM	Mid-depth		1			
	Bottom		6			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Mar. 29 (a)	Surface		2			
8:45AM	Mid-depth		2			
	Bottom		3			
Mar. 30	Surface	3	3	3	3	5
9:00AM	Mid-depth	2	2	3	3	3
	Bottom	3	4	5	4	2
Apr. 2	Surface	5	3	5	5	5
11:20AM	Mid-depth	11	5	5	3	6
	Bottom	7,250	6	5	12	6
Apr. 15	Surface	6	4	8	6	8
10:45AM	Mid-depth	1,370	400	5	8	17
	Bottom	2,950	7,650	8	6,550	16
Apr. 16	Surface	6	6	5	5	4
11:25AM	Mid-depth	3,950	360	28	7	4
	Bottom	3,350	1,270	390	1,260	10
Apr. 17 (a)	Surface	4	4	4	3	9
11:55AM	Mid-depth	3	3	3	4	4
	Bottom	7	9	9	12	4
(a)	Surface		3	4	4	4
12:25PM	Mid-depth		3	4	3	4
	Bottom		12	9	8	4
Apr. 23 (a)	Surface		1			
4:30AM	Mid-depth		1			
	Bottom		2			
(a)	Surface		3			
4:45AM	Mid-depth		2			
	Bottom		2			
Apr. 24 (a)	Surface		1			
5:30AM	Mid-depth		2			
	Bottom		2			
(a)	Surface		2			
5:45AM	Mid-depth		2			
	Bottom		2			
Apr. 25	Surface					1
6:44AM (12A)	Mid-depth					2
	Bottom					3

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Apr. 26 7:31AM (12A)	Surface					3
	Mid-depth					3
	Bottom					5
Apr. 27 (a) 7:30AM	Surface		4			
	Mid-depth		5			
	Bottom		5			
(a) 7:45AM	Surface		4			
	Mid-depth		4			
	Bottom		5			
(a) 8:00AM	Surface		3			
	Mid-depth		3			
	Bottom		4			
(a) 8:15AM	Surface		6			
	Mid-depth		5			
	Bottom		9			
Apr. 28 (a) 8:15AM	Surface		5			
	Mid-depth		4			
	Bottom		4			
(a) 8:30AM	Surface		2			
	Mid-depth		3			
	Bottom		6			
(a) 8:45AM	Surface		2			
	Mid-depth		250			
	Bottom		3,250			
(a) 9:00AM	Surface		7			
	Mid-depth		185			
	Bottom		8,050			
Apr. 29 9:15AM	Surface	16	18	15	11	19
	Mid-depth	3,000	2,150	1,950	23	34
	Bottom	3,550	5,800	3,850	4,100	44
Apr. 30 (a) 9:45AM	Surface		73			
	Mid-depth		960			
	Bottom		9,150			
(a) 10:00AM	Surface		36			
	Mid-depth		1,000			
	Bottom		10,600			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Apr. 30 (a) 10:15AM	Surface		27			
	Mid-depth		1,880			
	Bottom		11,050			
(a) 10:30AM	Surface		113			
	Mid-depth		4,600			
	Bottom		11,600			
May 1 (a) 10:30AM	Surface		15			
	Mid-depth		300			
	Bottom		2,500			
(a) 10:45AM	Surface		17			
	Mid-depth		2,800			
	Bottom		4,900			
(a) 11:00AM	Surface		45			
	Mid-depth		2,700			
	Bottom		10,350			
(a) 11:15AM	Surface		23			
	Mid-depth		260			
	Bottom		2,750			
May 2 (a) 11:15AM	Surface		21			
	Mid-depth		25			
	Bottom		360			
(a) 11:30AM	Surface		23			
	Mid-depth		1,600			
	Bottom		7,700			
(a) 11:45AM	Surface		25			
	Mid-depth		710			
	Bottom		9,200			
(a) 12:00AM	Surface		39			
	Mid-depth		850			
	Bottom		10,250			
May 3 (a) 12:15PM	Surface		42			
	Mid-depth		4,700			
	Bottom		9,650			
(a) 12:30PM	Surface		47			
	Mid-depth		7,400			
	Bottom		10,300			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 3 (a) 12:45PM	Surface		74			
	Mid-depth		7,200			
	Bottom		11,150			
(a) 1:00PM	Surface		106			
	Mid-depth		9,000			
	Bottom		10,400			
May 4 1:19PM	Surface	3,200	107	144	93	
	Mid-depth	7,000	1,810	3,150	136	
	Bottom	10,050	9,850	5,750	9,000	
May 5 (a) 2:15PM	Surface		121			
	Mid-depth		8,600			
	Bottom		10,600			
(a) 2:30PM	Surface		287			
	Mid-depth		8,350			
	Bottom		11,600			
(a) 2:45PM	Surface		260			
	Mid-depth		9,650			
	Bottom		11,900			
(a) 3:00PM	Surface		360			
	Mid-depth		9,550			
	Bottom		12,450			
May 6 (a) 3:15PM	Surface		540			
	Mid-depth		5,100			
	Bottom		6,250			
(a) 3:30PM	Surface		760			
	Mid-depth		5,500			
	Bottom		8,200			
(a) 3:45PM	Surface		1,140			
	Mid-depth		6,500			
	Bottom		8,300			
(a) 4:00PM	Surface		1,600			
	Mid-depth		8,350			
	Bottom		9,500			
May 7 (a) 4:15PM	Surface		128			
	Mid-depth		6,250			
	Bottom		7,350			

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 7 (a) 4:30PM	Surface		420			
	Mid-depth		7,200			
	Bottom		9,200			
(a) 4:45PM	Surface		380			
	Mid-depth		8,050			
	Bottom		9,800			
(a) 5:00PM	Surface		1,110			
	Mid-depth		8,950			
	Bottom		9,400			
May 8 (a) 4:45AM	Surface		1,550			
	Mid-depth		10,150			
	Bottom		9,850			
(a) 5:00AM	Surface		3,250			
	Mid-depth		10,500			
	Bottom		10,000			
(a) 5:15AM	Surface		2,000			
	Mid-depth		9,700			
	Bottom		10,150			
(a) 5:30AM	Surface		2,300			
	Mid-depth		11,250			
	Bottom		12,800			
May 9 (a) 5:45AM	Surface		950			
	Mid-depth		7,750			
	Bottom		7,200			
(a) 6:00AM	Surface		2,500			
	Mid-depth		8,600			
	Bottom		10,000			
(a) 6:15AM	Surface		2,700			
	Mid-depth		8,600			
	Bottom		11,050			
(a) 6:30AM	Surface		1,830			
	Mid-depth		9,800			
	Bottom		11,750			
May 10 6:51AM	Surface	770	8,750	630	700	
	Mid-depth	9,750	7,800	6,100	3,550	
	Bottom	10,650	9,100	7,350	9,450	

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 11 (a) 7:47AM	Surface	580				
	Mid-depth	9,300				
	Surface	10,400				
(a) 8:42AM	Surface		1,240	2,340	1,010	810
	Mid-depth		11,250	11,650	12,000	1,300
	Bottom		12,450	11,550	12,700	8,350
May 12 8:30AM	Surface	2,150	1,600	900	650	700
	Mid-depth	7,350	7,850	7,350	3,000	750
	Bottom	8,650	8,100	10,750	11,350	1,150
May 13 (a) 9:00AM	Surface		810			
	Mid-depth		4,300			
	Bottom		8,650			
(a) 9:15AM	Surface		830			
	Mid-depth		7,000			
	Bottom		6,050			
(a) 9:30AM	Surface		1,020			
	Mid-depth		6,950			
	Bottom		5,000			
(a) 9:45AM	Surface		1,900			
	Mid-depth		8,050			
	Bottom		11,550			
May 14 10:15AM	Surface	680	560		250	
	Mid-depth	10,550	8,550		2,290	
	Bottom	11,800	9,700		6,350	
May 15 10:57AM	Surface	1,190	1,220		1,440	
	Mid-depth	6,400	3,550		8,650	
	Bottom	13,900	13,100		12,750	
May 16 11:40AM	Surface	310	280		400	
	Mid-depth	10,950	10,500		3,300	
	Bottom	12,300	11,200		11,150	
May 17 12:25PM	Surface	9	12		14	
	Mid-depth	330	51		12	
	Bottom	9,700	3,750		1,600	
May 18 12:51PM	Surface	8	10	9	7	
	Mid-depth	18	12	8	7	
	Bottom	7,900	11	9	15	

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1938						
May 19	Surface	22	16		10	
2:05PM	Mid-depth	4,550	3,650		2,500	
	Bottom	11,550	10,750		11,100	
May 20	Surface	72	155		39	
2:50PM	Mid-depth	2,800	3,900		4,150	
	Bottom	7,500	5,700		9,350	
May 21	Surface	132	520		139	
3:45PM	Mid-depth	12,400	11,000		10,700	
	Bottom	13,500	12,600		13,550	
May 22	Surface	1,050	2,700		1,120	
3:40AM	Mid-depth	9,750	8,050		10,600	
	Bottom	11,500	10,950		10,900	
May 23	Surface	1,040	440		320	
4:40AM	Mid-depth	10,300	10,800		10,350	
	Bottom	12,100	11,550		12,550	
May 24	Surface	1,210	2,440		370	
5:34AM	Mid-depth	7,800	6,000		5,850	
	Bottom	8,900	9,000		8,150	
May 25	Surface	29	25		27	
6:26AM	Mid-depth	25	2,540		22	
	Bottom	6,900	6,450		5,800	
May 26	Surface	21	32		26	
7:16AM	Mid-depth	3,250	2,150		136	
	Bottom	10,700	7,300		5,650	
May 27	Surface	79	21		24	
8:05AM	Mid-depth	4,000	6,350		4,800	
	Bottom	9,450	6,900		7,900	
May 28	Surface	26	101		26	
8:55AM	Mid-depth	3,450	7,150		2,150	
	Bottom	12,450	11,650		11,000	
May 29	Surface	129	800		58	
9:45AM	Mid-depth	11,350	10,900		4,250	
	Bottom	12,500	11,850		11,450	
May 30	Surface	760	800		470	
10:40AM	Mid-depth	12,900	10,200		10,400	
	Bottom	13,700	9,200		12,900	

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 31 11:29AM	Surface	1,000	1,110		1,030	
	Mid-depth	10,150	10,250		9,050	
	Bottom	11,000	12,800		12,600	
June 1 12:25PM	Surface	1,940	1,790		1,740	
	Mid-depth	12,850	11,550		12,550	
	Bottom	13,200	13,000		12,850	
June 2 1:23PM	Surface	6,400	5,950		2,250	
	Mid-depth	12,500	11,150		9,700	
	Bottom	13,900	11,050		11,450	
June 3 2:20PM	Surface	3,850	5,500		2,200	
	Mid-depth	14,100	12,900		13,250	
	Bottom	14,400	13,650		4,200	
June 4 3:25PM	Surface	6,150	6,350		3,500	
	Mid-depth	14,250	11,300		11,900	
	Bottom	14,900	12,450		12,100	
June 5 4:27PM	Surface	8,300	8,750		4,100	
	Mid-depth	13,600	12,750		13,250	
	Bottom	13,550	13,800		14,250	
June 6 5:09AM	Surface				2,800	
	Mid-depth				11,800	
	Bottom				13,700	
June 7 6:10AM	Surface				2,650	
	Mid-depth				8,400	
	Bottom				10,850	
July 7 5:50AM	Surface	3,000	4,350			
	Mid-depth	12,200	8,500			
	Bottom	12,500	9,450			
July 8 6:50AM	Surface	2,250	2,500			
	Mid-depth	11,850	6,950			
	Bottom	12,400	11,400			
July 9 7:35AM	Surface	3,000	2,300			
	Mid-depth	12,400	8,250			
	Bottom	12,600	11,850			
July 21 4:20PM	Surface	910	3,650		960	
	Mid-depth	12,150	10,050		10,000	
	Bottom	12,750	11,950		12,300	

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
July 22 5:56PM	Surface		14			
	Mid-depth		13			
	Bottom		6,050			
July 23 5:50AM	Surface	9	10		11	
	Mid-depth	10	8		12	
	Bottom	10	20		32	
July 24 6:50AM	Surface	7	5		5	
	Mid-depth	7	6		7	
	Bottom	6	12		13	
July 26 8:35AM	Surface	5	6			
	Mid-depth	7	6			
	Bottom	7	14			
Aug. 5 6:21AM (12A)	Surface					17
	Mid-depth					24
	Bottom					940
Aug. 6 6:30AM	Surface	86				
	Mid-depth	11,250				
	Bottom	11,850				
Aug. 7 7:15AM	Surface	200				
	Mid-depth	10,800				
	Bottom	11,350				
Aug. 9 8:35AM	Surface	3,350	6,200			
	Mid-depth	12,950	11,500			
	Bottom	13,300	11,850			
Aug. 10 9:15AM	Surface	740				
	Mid-depth	6,250				
	Bottom	12,350				
Aug. 12 9:50AM	Surface	108	247		53	
	Mid-depth	11,600	2,900		285	
	Bottom	12,050	10,050		10,300	
Sept. 3 5:00AM	Surface	4,150				
	Mid-depth	13,150				
	Bottom					
Sept. 8 8:45AM	Surface	8,100				
	Mid-depth	15,000				
	Bottom	15,200				

Table 1 (continued) Tide cycle: one hour before to high tide

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1938						
Sept.19	Surface	580				
5:15AM	Mid-depth	10,850				
	Bottom	11,750				

Table 2 Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Nov. 16 (a) 8:24AM	Surface		7			
	Mid-depth		7			
	Bottom		5			
(a) 8:34AM	Surface		9			
	Mid-depth		13			
	Bottom		15			
(a) 8:44AM	Surface		5			
	Mid-depth		11			
	Bottom		15			
(a) 8:54AM	Surface		7			
	Mid-depth		7			
	Bottom		11			
(a) 9:04AM	Surface		7			
	Mid-depth		11			
	Bottom		9			
(a) 9:14AM	Surface		6			
	Mid-depth		11			
	Bottom		11			
(a) 9:24AM	Surface		6			
	Mid-depth		11			
	Bottom		9			
Nov. 17 (a) 9:11AM	Surface		9			
	Mid-depth		21			
	Bottom		8,700			
(a) 9:26AM	Surface		9			
	Mid-depth		1,000			
	Bottom		5,400			
(a) 9:41AM	Surface		7			
	Mid-depth		19			
	Bottom		8,000			
(a) 9:56AM	Surface		5			
	Mid-depth		43			
	Bottom		6,900			
(a) 10:11AM	Surface		7			
	Mid-depth		21			
	Bottom		6,100			

Table 2 (continued) Tide cycle: hi h tide to one hour after

Parts per million

Date	Position	Stations 8	9	10	11	12
1937						
Nov. 18 (a) 10:15AM	Surface		83			
	Mid-depth		5,100			
	Bottom		6,800			
(a) 10:30AM	Surface		101			
	Mid-depth		12,000			
	Bottom		8,000			
(a) 10:45AM	Surface		840			
	Mid-depth		2,500			
	Bottom		4,000			
(a) 11:00AM	Surface		87			
	Mid-depth		2,100			
	Bottom		4,500			
(a) 10:45PM	Surface		5			
	Mid-depth		400			
	Bottom		5,100			
(a) 11:00PM	Surface		9			
	Mid-depth		27			
	Bottom		9,800			
(a) 11:15PM	Surface		9			
	Mid-depth		1,160			
	Bottom		10,350			
(a) 11:30PM	Surface		19			
	Mid-depth		2,700			
	Bottom		11,100			
Nov. 19 (a) 11:00AM	Surface		23			
	Mid-depth		340			
	Bottom		460			
(a) 11:15AM	Surface		145			
	Mid-depth		9,200			
	Bottom		8,000			
(a) 11:30AM	Surface		143			
	Mid-depth		5,400			
	Bottom		10,000			
(a) 11:45AM	Surface		137			
	Mid-depth		5,000			
	Bottom		6,300			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Nov. 20 (a) 11:45AM	Surface		3,800			
	Mid-depth		11,350			
	Bottom		11,200			
(a) 12:00AM	Surface		730			
	Mid-depth		9,650			
	Bottom		13,000			
(a) 12:15PM	Surface		730			
	Mid-depth		11,450			
	Bottom		12,450			
(a) 12:30PM	Surface		910			
	Mid-depth		11,200			
	Bottom		13,100			
Nov. 22 (a) 1:45PM	Surface		960			
	Mid-depth		6,700			
	Bottom		10,300			
(a) 2:00PM	Surface		280			
	Mid-depth		7,500			
	Bottom		9,600			
(a) 2:15PM	Surface		300			
	Mid-depth		4,900			
	Bottom		9,100			
(a) 2:30PM	Surface		300			
	Mid-depth		2,000			
	Bottom		11,500			
Nov. 23 (a) 2:45PM	Surface		360			
	Mid-depth		10,000			
	Bottom		10,700			
(a) 3:00PM	Surface		7,200			
	Mid-depth		3,600			
	Bottom		10,600			
(a) 3:15PM	Surface		380			
	Mid-depth		4,800			
	Bottom		11,200			
Nov. 26 (a) 5:30AM	Surface		1,300			
	Mid-depth		8,200			
	Bottom		10,300			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1957						
Nov. 26 (a) 5:45AM	Surface		10,000			
	Mid-depth		8,800			
	Bottom		10,800			
(a) 6:00AM	Surface		400			
	Mid-depth		900			
	Bottom		6,500			
(a) 6:15AM	Surface		420			
	Mid-depth		460			
	Bottom		10,000			
(a) 6:30AM	Surface		500			
	Mid-depth		390			
	Bottom		5,800			
Nov. 27 (a) 6:30AM	Surface		9,700			
	Mid-depth		11,700			
	Bottom		11,800			
(a) 6:45AM	Surface		7,650			
	Mid-depth		11,700			
	Bottom		11,500			
(a) 7:00AM	Surface		10,150			
	Mid-depth		11,600			
	Bottom		12,000			
(a) 7:15AM	Surface		11,300			
	Mid-depth		11,300			
	Bottom		11,700			
Nov. 29 (a) 8:00AM	Surface		7			
	Mid-depth		7			
	Bottom		7			
(a) 8:15AM	Surface		7			
	Mid-depth		7			
	Bottom		9			
(a) 8:30AM	Surface		9			
	Mid-depth		9			
	Bottom		11			
(a) 8:45AM	Surface		9			
	Mid-depth		9			
	Bottom		9			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Nov. 29 (a)	Surface		9			
9:00AM	Mid-depth		13			
	Bottom		9			
Nov. 30 (a)	Surface		7			
8:45AM	Mid-depth		7			
	Bottom		5			
(a)	Surface		5			
9:00AM	Mid-depth		5			
	Bottom		7			
(a)	Surface		7			
9:15AM	Mid-depth		5			
	Bottom		5			
(a)	Surface		5			
9:30AM	Mid-depth		5			
	Bottom		5			
Dec. 1 (a)	Surface		11			
9:30AM	Mid-depth		5			
	Bottom		5			
(a)	Surface		5			
9:45AM	Mid-depth		5			
	Bottom		5			
(a)	Surface		5			
10:00AM	Mid-depth		5			
	Bottom		5			
(a)	Surface		3			
10:15AM	Mid-depth		5			
	Bottom		5			
Dec. 2 (a)	Surface		3			
10:15AM	Mid-depth		5			
	Bottom		5			
(a)	Surface		3			
10:30AM	Mid-depth		5			
	Bottom		5			
(a)	Surface		5			
10:45AM	Mid-depth		3			
	Bottom		5			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1937						
Dec. 2 (a)	Surface		7			
11:00AM	Mid-depth		5			
	Bottom		5			
Dec. 3 (a)	Surface		15			
10:45AM	Mid-depth		87			
	Bottom		9,300			
(a)	Surface		27			
11:00AM	Mid-depth		2,500			
	Bottom		12,200			
(a)	Surface		49			
11:15AM	Mid-depth		3,600			
	Bottom		12,300			
(a)	Surface		41			
11:30AM	Mid-depth		2,900			
	Bottom		12,600			
(a)	Surface		45			
11:45AM	Mid-depth		6,200			
	Bottom		12,200			
Dec. 4 (a)	Surface		271			
12:30PM	Mid-depth		8,850			
	Bottom		8,300			
(a)	Surface		282			
12:45PM	Mid-depth		9,400			
	Bottom		9,350			
(a)	Surface		288			
1:00PM	Mid-depth		8,700			
	Bottom		9,350			
(a)	Surface		300			
1:15PM	Mid-depth		8,000			
	Bottom		9,200			
(a)	Surface		300			
1:30PM	Mid-depth		8,550			
	Bottom		9,550			
Dec. 5 (a)	Surface		146			
12:00AM	Mid-depth		9,900			
	Bottom		11,700			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 5 (a) 12:15PM	Surface		119			
	Mid-depth		9,300			
	Bottom		12,800			
(a) 12:30PM	Surface		133			
	Mid-depth		8,700			
	Bottom		13,200			
(a) 12:45PM	Surface		240			
	Mid-depth		5,900			
	Bottom		13,400			
(a) 1:00PM	Surface		241			
	Mid-depth		6,200			
	Bottom		13,350			
Dec. 6 (a) 12:45PM	Surface		440			
	Mid-depth		7,700			
	Bottom		12,500			
(a) 1:00PM	Surface		560			
	Mid-depth		8,200			
	Bottom		12,600			
(a) 1:15PM	Surface		860			
	Mid-depth		9,000			
	Bottom		13,300			
(a) 1:30PM	Surface		680			
	Mid-depth		11,100			
	Bottom		13,700			
Dec. 7 (a) 1:30PM	Surface		15			
	Mid-depth		19			
	Bottom		89			
(a) 1:45PM	Surface		19			
	Mid-depth		111			
	Bottom		137			
(a) 2:00PM	Surface		17			
	Mid-depth		29			
	Bottom		1,080			
(a) 2:15PM	Surface		17			
	Mid-depth		45			
	Bottom		163			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Dec. 7 (a) 2:30PM	Surface		29			
	Mid-depth		9			
	Bottom		23			
Dec. 8 (a) 2:15PM	Surface		25			
	Mid-depth		55			
	Bottom		380			
(a) 2:30PM	Surface		27			
	Mid-depth		83			
	Bottom		300			
(a) 2:45PM	Surface		25			
	Mid-depth		145			
	Bottom		360			
(a) 3:00PM	Surface		25			
	Mid-depth		25			
	Bottom		280			
(a) 3:15PM	Surface		25			
	Mid-depth		101			
	Bottom		200			
Dec. 9 (a) 3:00PM	Surface		8			
	Mid-depth		8			
	Bottom		71			
(a) 3:15PM	Surface		8			
	Mid-depth		1,500			
	Bottom		17			
(a) 3:30PM	Surface		5			
	Mid-depth		9			
	Bottom		3,100			
(a) 3:45PM	Surface		9			
	Mid-depth		7			
	Bottom		11			
Dec. 10 (a) 4:00PM	Surface					
	Mid-depth					
	Bottom					
(a) 4:15PM	Surface		7			
	Mid-depth		2,180			
	Bottom		6,300			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations 8	9	10	11	12
1937						
Dec. 10 (a) 4:30PM	Surface		15			
	Mid-depth		181			
	Bottom		1,600			
(a) 4:45PM	Surface		123			
	Mid-depth		224			
	Bottom		2,800			
Dec. 13 (a) 6:15AM	Surface		3,500			
	Mid-depth		10,700			
	Bottom		10,600			
(a) 6:30AM	Surface		4,500			
	Mid-depth		10,300			
	Bottom		11,500			
(a) 6:45AM	Surface		4,400			
	Mid-depth		10,900			
	Bottom		12,200			
(a) 7:00AM	Surface		7,400			
	Mid-depth		10,500			
	Bottom		11,900			
(a) 7:15AM	Surface		7,600			
	Mid-depth		11,500			
	Bottom		10,900			
Dec. 14 (a) 7:15AM	Surface		1,000			
	Mid-depth		8,700			
	Bottom		11,700			
(a) 7:30AM	Surface		8,300			
	Mid-depth		11,400			
	Bottom		10,800			
(a) 7:45AM	Surface		5,700			
	Mid-depth		11,000			
	Bottom		11,800			
(a) 8:00AM	Surface		7,100			
	Mid-depth		12,100			
	Bottom		12,600			
Dec. 15 (a) 8:15AM	Surface		7,600			
	Mid-depth		14,600			
	Bottom		14,800			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations 8	9	10	11	12
1937						
Dec. 15 (a) 8:30AM	Surface		6,500			
	Mid-depth		12,600			
	Bottom		14,700			
(a) 8:45AM	Surface		5,300			
	Mid-depth		13,000			
	Bottom		13,500			
(a) 9:00AM	Surface		4,700			
	Mid-depth		13,700			
	Bottom		13,000			
Dec. 16 (a) 9:00AM	Surface		12,900			
	Mid-depth		14,000			
	Bottom		14,100			
(a) 9:15AM	Surface		12,500			
	Mid-depth		13,600			
	Bottom		13,600			
(a) 9:30AM	Surface		13,300			
	Mid-depth		14,300			
	Bottom		14,700			
(a) 9:45AM	Surface		13,000			
	Mid-depth		14,100			
	Bottom		14,250			
Dec. 17 (a) 9:45AM	Surface		8,000			
	Mid-depth		13,900			
	Bottom		14,750			
(a) 10:00AM	Surface		1,000			
	Mid-depth		9,000			
	Bottom		14,750			
(a) 10:15AM	Surface		6,500			
	Mid-depth		14,300			
	Bottom		14,700			
(a) 10:30AM	Surface		6,800			
	Mid-depth		15,500			
	Bottom		14,800			
Dec. 18 (a) 10:45AM	Surface		13,300			
	Mid-depth		14,400			
	Bottom		14,200			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Dec. 18 (a) 11:00AM	Surface		12,200			
	Mid-depth		14,200			
	Bottom		15,900			
(a) 11:15AM	Surface		11,100			
	Mid-depth		12,600			
	Bottom		15,900			
(a) 11:30AM	Surface		9,500			
	Mid-depth		13,100			
	Bottom		14,000			
Dec. 20 (a) 12:30PM	Surface		135			
	Mid-depth		10,800			
	Bottom		12,600			
(a) 12:45PM	Surface		260			
	Mid-depth		11,600			
	Bottom		12,900			
(a) 1:00PM	Surface		210			
	Mid-depth		1,260			
	Bottom		13,300			
(a) 1:15PM	Surface		200			
	Mid-depth		1,800			
	Bottom		13,000			
Dec. 21 (d) 1:20PM (12A)	Surface					115
	Mid-depth					10,200
	Bottom					10,400
(a) 1:40PM	Surface	1,220	137		259	
	Mid-depth	13,500	11,000		8,200	
	Bottom	13,800	13,200		13,900	
Dec. 22 (d) 2:10PM (12A)	Surface					65
	Mid-depth					340
	Bottom					5,400
Dec. 23 (d) 3:10PM (12A)	Surface					11
	Mid-depth					13
	Bottom					11
(a) 3:25PM	Surface	13	11		13	
	Mid-depth	117	480		7	
	Bottom	940	1,420		2,240	

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Dec. 24 (a)	Surface		9,500			
4:15PM	Mid-depth		11,000			
	Bottom		11,600			
(a)	Surface		2,600			
4:30PM	Mid-depth		11,800			
	Bottom		11,700			
(a)	Surface		12,000			
4:45PM	Mid-depth		5,000			
	Bottom		10,700			
(a)	Surface		11,600			
5:00PM	Mid-depth		11,300			
	Bottom		4,800			
Dec. 28 (a)	Surface	12,150	13,150			
7:35AM	Mid-depth	13,350	13,500			
	Bottom	13,500	13,500			
(a)	Surface		14,250		9,900	
8:35AM	Mid-depth		13,200		14,600	
	Bottom		14,100		13,200	
Dec. 29	Surface					500
8:20AM(12A)	Mid-depth					8,900
	Bottom					9,300
Dec. 30	Surface					3,700
9:01AM(12A)	Mid-depth					10,900
	Bottom					10,500
Dec. 31	Surface					2,700
9:40AM(12A)	Mid-depth					10,900
	Bottom					12,300
1938						
Jan. 1	Surface					3,800
10:19AM(12A)	Mid-depth					3,700
	Bottom					11,700
Jan. 2	Surface					5,000
10:56AM(12A)	Mid-depth					10,700
	Bottom					11,600

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
Jan. 3 11:34AM (12A)	Surface					5,000
	Mid-depth					10,900
	Bottom					11,100
Jan. 4 1:20PM (12A)	Surface					2,900
	Mid-depth					8,400
	Bottom					10,700
Jan. 5 12:49PM (12A)	Surface					3,500
	Mid-depth					10,000
	Bottom					10,800
Jan. 6 1:30PM (12A)	Surface					1,080
	Mid-depth					9,600
	Bottom					9,900
Jan. 7 2:15PM (12A)	Surface					980
	Mid-depth					8,650
	Bottom					9,400
Jan. 12 6:44AM (12A)	Surface					1,300
	Mid-depth					10,100
	Bottom					10,600
Jan. 13 7:42AM (12A)	Surface					2,600
	Mid-depth					12,700
	Bottom					14,900
Jan. 14 (a) 8:40AM	Surface		8,200			
	Mid-depth		15,200			
	Bottom		15,100			
(a) 8:50AM	Surface		10,000			
	Mid-depth		14,500			
	Bottom		15,700			
(a) 9:00AM	Surface		9,700			
	Mid-depth		15,700			
	Bottom		15,500			
(a) 9:10AM	Surface		5,200			
	Mid-depth		15,000			
	Bottom		15,700			
(a) 9:20AM	Surface		10,200			
	Mid-depth		15,600			
	Bottom		15,600			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations 8	9	10	11	12
1938						
Jan. 14 (a) 9:30AM	Surface		14,300			
	Mid-depth		14,100			
	Bottom		15,600			
(a) 9:40AM	Surface		7,000			
	Mid-depth		14,800			
	Bottom		14,000			
Jan. 15 (a) 9:40AM	Surface		3,900			
	Mid-depth		14,300			
	Bottom		15,300			
(a) 9:50AM	Surface		3,000			
	Mid-depth		15,100			
	Bottom		15,450			
(a) 10:00AM	Surface		2,000			
	Mid-depth		15,250			
	Bottom		15,400			
(a) 10:10AM	Surface		2,750			
	Mid-depth		15,350			
	Bottom		15,400			
(a) 10:20AM	Surface		2,950			
	Mid-depth		14,900			
	Bottom		15,600			
(a) 10:30AM	Surface		3,350			
	Mid-depth		14,800			
	Bottom		15,600			
(a) 10:40AM	Surface		2,400			
	Mid-depth		15,050			
	Bottom		15,400			
Jan. 16 (a) 10:30AM	Surface		6,850			
	Mid-depth		14,000			
	Bottom		14,700			
(a) 10:40AM	Surface		4,350			
	Mid-depth		14,350			
	Bottom		14,400			
(a) 10:50AM	Surface		6,250			
	Mid-depth		14,250			
	Bottom		14,600			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
Jan. 16 (a) 11:00AM	Surface		6,150			
	Mid-depth		14,600			
	Bottom		14,550			
(a) 11:10AM	Surface		4,000			
	Mid-depth		14,350			
	Bottom		14,550			
(a) 11:20AM	Surface		2,100			
	Mid-depth		13,750			
	Bottom		14,050			
Jan. 17 (a) 11:20AM	Surface		8,300			
	Mid-depth		14,100			
	Bottom		15,400			
(a) 11:30AM	Surface		9,300			
	Mid-depth		14,100			
	Bottom		14,300			
(a) 11:40AM	Surface		7,800			
	Mid-depth		14,400			
	Bottom		14,900			
(a) 11:50AM	Surface		7,400			
	Mid-depth		14,500			
	Bottom		15,300			
(a) 12:00AM	Surface		9,300			
	Mid-depth		15,200			
	Bottom		15,600			
(a) 12:10PM	Surface		5,750			
	Mid-depth		14,300			
	Bottom		14,700			
(a) 12:20PM	Surface		5,300			
	Mid-depth		13,700			
	Bottom		15,200			
Jan. 18 (a) 12:10PM	Surface		4,200			
	Mid-depth		13,500			
	Bottom		13,900			
(a) 12:20PM	Surface		6,600			
	Mid-depth		13,750			
	Bottom		14,300			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations 8	9	10	11	12
1938						
Jan. 18 (a) 12:30PM	Surface		4,300			
	Mid-depth		14,000			
	Bottom		14,600			
(a) 12:40PM	Surface		3,400			
	Mid-depth		14,200			
	Bottom		14,000			
(a) 12:50PM	Surface		3,500			
	Mid-depth		13,600			
	Bottom		14,300			
(a) 1:00PM	Surface		3,500			
	Mid-depth		13,700			
	Bottom		14,100			
(a) 1:10PM	Surface		2,700			
	Mid-depth		13,400			
	Bottom		14,100			
Jan. 19 (a) 1:00PM	Surface		3,000			
	Mid-depth		12,200			
	Bottom		12,200			
(a) 1:15PM	Surface		2,800			
	Mid-depth		12,500			
	Bottom		13,700			
(a) 1:30PM	Surface		1,850			
	Mid-depth		10,700			
	Bottom		13,900			
(a) 1:45PM	Surface		2,250			
	Mid-depth		9,900			
	Bottom		13,800			
Jan. 20 (a) 2:00PM	Surface		1,200			
	Mid-depth		10,750			
	Bottom		12,350			
(a) 2:15PM	Surface		1,300			
	Mid-depth		9,350			
	Bottom		11,750			
(a) 2:30PM	Surface		900			
	Mid-depth		10,400			
	Bottom		12,050			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
1938		8	9	10	11	12
Jan. 20 (a) 2:45PM	Surface		1,100			
	Mid-depth		10,000			
	Bottom		11,550			
Jan. 21 2:42PM(12A)	Surface					1,600
	Mid-depth					6,600
	Bottom					11,800
Jan. 22 3:39PM(12A)	Surface					930
	Mid-depth					12,350
	Bottom					13,400
Jan. 26 (a) 7:15AM	Surface		8			
	Mid-depth		5			
	Bottom		6			
(a) 7:30AM	Surface		9			
	Mid-depth		6			
	Bottom		6			
(a) 7:45AM	Surface		8			
	Mid-depth		6			
	Bottom		7			
(a) 8:00AM	Surface		7			
	Mid-depth		8			
	Bottom		6			
Jan. 27 (a) 8:00AM	Surface		5			
	Mid-depth		5			
	Bottom		7			
(a) 8:15AM	Surface		5			
	Mid-depth		3			
	Bottom		5			
(a) 8:30AM	Surface		5			
	Mid-depth		5			
	Bottom		7			
(a) 8:45AM	Surface		3			
	Mid-depth		5			
	Bottom		5			
(a) 9:00AM	Surface		5			
	Mid-depth		3			
	Bottom		5			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 31 10:31AM(12A)	Surface					8
	Mid-depth					18
	Bottom					12
Feb. 1 11:10AM(12A)	Surface					5
	Mid-depth					5
	Bottom					5
Feb. 2 (a) 12:00AM	Surface		9			
	Mid-depth		3,900			
	Bottom		11,650			
(a) 12:15PM	Surface		7			
	Mid-depth		5,300			
	Bottom		11,900			
(a) 12:30PM	Surface		6			
	Mid-depth		6,000			
	Bottom		12,400			
(a) 12:45PM	Surface		7			
	Mid-depth		2,700			
	Bottom		12,200			
Feb. 3 (a) 12:30PM	Surface		32			
	Mid-depth		6,500			
	Bottom		5,550			
(a) 12:45PM	Surface		38			
	Mid-depth		3,300			
	Bottom		7,900			
(a) 1:00PM	Surface		31			
	Mid-depth		3,250			
	Bottom		8,200			
(a) 1:15PM	Surface		37			
	Mid-depth		4,550			
	Bottom		8,400			
(a) 1:30PM	Surface		10			
	Mid-depth		500			
	Bottom		8,700			
Feb. 4 (d) 1:05PM(12A)	Surface					5
	Mid-depth					5
	Bottom					7

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 4 (a) 1:15PM	Surface		6			
	Mid-depth		1,780			
	Bottom		7,500			
(a) 1:30PM	Surface		10			
	Mid-depth		1,810			
	Bottom		10,000			
(a) 1:45PM	Surface		5			
	Mid-depth		170			
	Bottom		10,300			
(a) 2:00PM	Surface		6			
	Mid-depth		420			
	Bottom		6,000			
Feb. 6 2:39PM(12A)	Surface					23
	Mid-depth					25
	Bottom					1,060
Feb. 7 3:37PM(12A)	Surface					7
	Mid-depth					7
	Bottom					17
Feb. 8 5:05PM	Surface	7	5		6	
	Mid-depth	11	12		7	
	Bottom	10,250	9,550		11	
Feb.11 (d) 7:26AM(12A)	Surface					9
	Mid-depth					158
	Bottom					1,790
(a) 7:45AM	Surface	14	6		9	
	Mid-depth	11,700	5,000		3,400	
	Bottom	13,400	12,850		7,300	
Feb.12 8:24AM(12A)	Surface					20
	Mid-depth					2,500
	Bottom					8,400
Feb.13 10:18AM(12A)	Surface					1,420
	Mid-depth					5,500
	Bottom					10,800
Feb.14 (d) 10:08AM(12A)	Surface					240
	Mid-depth					7,700
	Bottom					12,450

Table 2 (continued Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 14 (a) 10:20AM	Surface	187	260		1,180	
	Mid-depth	13,000	11,800		10,100	
	Bottom	13,600	13,000		13,600	
(a) 10:50AM	Surface	440	220		1,220	
	Mid-depth	12,700	12,800		12,600	
	Bottom	14,000	13,800		14,000	
Feb. 15 (a) 11:20AM	Surface	79	141		129	
	Mid-depth	12,900	12,500		11,700	
	Bottom	13,700	13,200		13,850	
(a) 11:50AM	Surface	157	195		99	
	Mid-depth	13,600	13,300		12,300	
	Bottom	13,700	13,750		13,900	
(d) 10:58AM(12A)	Surface					124
	Mid-depth					5,000
	Bottom					9,750
Feb. 16 11:44AM(12A)	Surface					15
	Mid-depth					93
	Bottom					4,300
Feb. 18 1:19PM(12A)	Surface					21
	Mid-depth					45
	Bottom					1,040
Feb. 19 2:09PM(12A)	Surface					39
	Mid-depth					1,650
	Bottom					7,550
Feb. 20(a) 3:15PM	Surface		1,140			
	Mid-depth		13,050			
	Bottom		13,800			
(a) 3:30PM	Surface		1,650			
	Mid-depth		12,900			
	Bottom		14,100			
(a) 3:45PM	Surface		980			
	Mid-depth		13,550			
	Bottom		14,300			
(a) 4:00PM	Surface		880			
	Mid-depth		13,900			
	Bottom		14,200			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Feb. 25 (d)	Surface					760
7:22AM(12A)	Mid-depth					9,900
	Bottom					13,900
(a)	Surface		1,500			
7:30AM	Mid-depth		13,000			
	Bottom		14,000			
(a)	Surface		1,300			
7:45AM	Mid-depth		12,700			
	Bottom		14,100			
(a)	Surface		1,320			
8:00AM	Mid-depth		13,200			
	Bottom		13,900			
(a)	Surface		840			
8:15AM	Mid-depth		13,900			
	Bottom		13,900			
Feb. 26 (d)	Surface					480
8:09AM(12A)	Mid-depth					5,800
	Bottom					13,000
(a)	Surface		1,350			
8:15AM	Mid-depth		12,950			
	Bottom		13,300			
(a)	Surface		1,290			
8:30AM	Mid-depth		12,650			
	Bottom		13,600			
(a)	Surface		1,050			
8:45AM	Mid-depth		12,900			
	Bottom		13,900			
(a)	Surface		850			
9:00AM	Mid-depth		13,400			
	Bottom		12,700			
(a)	Surface		810			
9:15AM	Mid-depth		13,200			
	Bottom		13,800			
Feb. 27 (d)	Surface					980
8:50AM(12A)	Mid-depth					7,200
	Bottom					12,400

Table 2 (continued) Tide cycle: hi h tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
Feb. 27 (a)	Surface		1,660			
9:00M	Mid-depth		12,000			
	Bottom		12,500			
(a)	Surface		1,380			
9:15AM	Mid-depth		11,500			
	Bottom		12,800			
(a)	Surface		1,380			
9:30AM	Mid-depth		12,550			
	Bottom		13,200			
(a)	Surface		1,470			
9:45AM	Mid-depth		12,650			
	Bottom		13,400			
Feb. 28 (d)	Surface					760
9:28M (12M)	Mid-depth					1,080
	Bottom					10,900
(a)	Surface	420	820		840	
9:45M	Mid-depth	11,650	10,700		9,750	
	Bottom	11,950	11,700		12,200	
Mar. 1 (d)	Surface					5,500
10:05AM (12M)	Mid-depth					7,200
	Bottom					10,500
(a)	Surface	3,100	4,600		6,300	
10:20AM	Mid-depth	11,400	11,500		11,200	
	Bottom	10,700	11,600		11,800	
Mar. 2	Surface					2,550
10:44AM (12M)	Mid-depth					3,050
	Bottom					5,800
Mar. 3	Surface					420
11:20AM (12M)	Mid-depth					420
	Bottom					1,400
Mar. 4	Surface					900
12:00M (12M)	Mid-depth					6,900
	Bottom					10,500
Mar. 5	Surface					1,700
12:42PM (12M)	Mid-depth					6,500
	Bottom					11,200

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Mar. 6 (a)	Surface	56	131		79	
1:33PM	Mid-depth	340	720		260	
	Bottom	5,800	8,800		5,600	
(d)	Surface					85
1:58PM (12A)	Mid-depth					380
	Bottom					4,200
Mar. 7 (d)	Surface					107
2:50PM (12A)	Mid-depth					390
	Bottom					4,700
(a)	Surface	54	98		153	
3:05PM	Mid-depth	900	2,500		4,750	
	Bottom	6,950	7,400		7,300	
Mar. 11 (a)	Surface	4,000	7,500		4,900	
6:14AM	Mid-depth	11,650	11,100		11,450	
	Bottom	14,150	13,600		12,050	
(d)	Surface					1,040
6:39AM (12A)	Mid-depth					6,150
	Bottom					11,550
Mar. 12 (a)	Surface	1,850	3,650		2,850	
7:20AM	Mid-depth	13,150	11,900		11,950	
	Bottom	13,600	12,900		13,000	
(d)	Surface					3,650
7:43AM (12A)	Mid-depth					10,850
	Bottom					13,450
Mar. 13 (a)	Surface	1,400	2,100			
8:15AM	Mid-depth	13,700	13,000			
	Bottom	14,050	13,850			
(d)	Surface					2,600
8:41AM (12A)	Mid-depth					10,800
	Bottom					13,750
Mar. 14	Surface					760
9:04AM (12A)	Mid-depth					7,450
	Bottom					12,750
Mar. 15	Surface					1,450
9:52AM (12A)	Mid-depth					11,750
	Bottom					14,650

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Mar. 16 10:38AM (12A)	Surface					340
	Mid-depth					3,600
	Bottom					12,650
Mar. 17 11:23AM (12A)	Surface					690
	Mid-depth					4,700
	Bottom					12,700
Mar. 18 12:07PM (12A)	Surface					330
	Mid-depth					1,900
	Bottom					7,450
Mar. 19 12:53PM (12A)	Surface					25
	Mid-depth					260
	Bottom					6,600
Mar. 20 1:39PM (12A)	Surface					240
	Mid-depth					990
	Bottom					9,350
Mar. 21 2:31PM (12A)	Surface					46
	Mid-depth					1,360
	Bottom					1,000
Mar. 22 3:27PM (12A)	Surface					9
	Mid-depth					109
	Bottom					4,200
Mar. 26 6:43AM (12A)	Surface					2
	Mid-depth					2
	Bottom					3
Mar. 27 7:45AM	Surface		2			
	Mid-depth		1			
	Bottom		1			
(a) 8:00AM	Surface		1			
	Mid-depth		1			
	Bottom		1			
(a) 8:15AM	Surface		1			
	Mid-depth		2			
	Bottom		2			
(a) 8:30AM	Surface		2			
	Mid-depth		3			
	Bottom		2			

Table 2 (continued) Tide cycle: hi h tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
Mar. 28 (d)	Surface					3
8:14M. (12A)	Mid-depth					2
	Bottom					1
(a)	Surface	3	1	81	1	3
8:40M.	Mid-depth	2	1	1	1	1
	Bottom	3	2	2	4	19
Mar. 29 (a)	Surface		2			
9:00M.	Mid-depth		3			
	Bottom		3			
(a)	Surface		2			
9:15M.	Mid-depth		3			
	Bottom		2			
(a)	Surface		2			
9:30M.	Mid-depth		3			
	Bottom		3			
(a)	Surface		2			
9:45M.	Mid-depth		2			
	Bottom		3			
(a)	Surface		3			
10:00M.	Mid-depth		2			
	Bottom		2			
Mar. 30	Surface					3
9:35M. (12A.)	Mid-depth					2
	Bottom					3
Mar. 31 (d)	Surface					6
10:14M. (12A.)	Mid-depth					4
	Bottom					6
(a)	Surface	3	3	3	4	3
10:35M.	Mid-depth	29	6	3	3	3
	Bottom	8,750	8,150	101	2,020	3
Apr. 1 (d)	Surface					5
10:54M. (12A.)	Mid-depth					5
	Bottom					8
(a)	Surface	4	3	8	9	5
11:15A.	Mid-depth	6	3	4	4	9
	Bottom	10,650	8,200	410	4,200	9

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
Apr. 2	Surface					5
11:38AM (12A)	Mid-depth					5
	Bottom					7
Apr. 3 (d)	Surface					4
12:23PM (12A)	Mid-depth					6
	Bottom					7
(a)	Surface	7	3	4	4	6
12:45PM	Mid-depth	31	400	3	6	5
	Bottom	5,550	4,500	78	2,050	10
Apr. 4 (d)	Surface					9
1:14PM (12A)	Mid-depth					8
	Bottom					9
(a)	Surface	4	4	4	6	9
1:35PM	Mid-depth	6	5	5	5	7
	Bottom	8,050	6,150	5	4,700	9
Apr. 5 (d)	Surface					5
2:11PM (12A)	Mid-depth					7
	Bottom					11
(a)	Surface	9	3	4	11	6
2:35PM	Mid-depth	20	225	5	7	7
	Bottom	8,600	7,000	5	2,500	19
Apr. 6 (d)	Surface					7
3:15PM (12A)	Mid-depth					10
	Bottom					10
(a)	Surface	6	300	5	9	8
3:40PM	Mid-depth	12	22	8	8	8
	Bottom	5,450	10,600	9,250	11,800	8
Apr. 7 (d)	Surface					21
4:20PM (12A)	Mid-depth					54
	Bottom					10,300
(a)	Surface	29	17	15	15	10
4:45PM	Mid-depth	2,300	2,200	4,100	1,080	13
	Bottom	12,500	12,100	3,750	6,950	2,650
Apr. 11 (d)	Surface					15
7:54AM (12A)	Mid-depth					35
	Bottom					3,600

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Apr. 11 (a) 8:15AM	Surface	14	14	26	14	15
	Mid-depth	7,200	4,600	650	1,040	99
	Bottom	11,900	11,500	10,650	4,650	2,750
Apr. 12 (d) 8:47AM (12A)	Surface					11
	Mid-depth					13
	Bottom					14
(a) 9:15AM	Surface	11	11	11	9	11
	Mid-depth	2,750	1,650	334	770	13
	Bottom	10,750	10,400	8,550	950	13
Apr. 13 (d) 9:55AM (12A)	Surface					15
	Mid-depth					25
	Bottom					440
(a) 9:55AM	Surface	12	13	13	11	13
	Mid-depth	9,950	4,350	310	3,250	40
	Bottom	11,050	8,150	3,900	9,100	700
Apr. 14 (d) 10:17AM (12A)	Surface					17
	Mid-depth					18
	Bottom					90
(a) 10:40AM	Surface	11	9	12	11	27
	Mid-depth	206	18	43	12	29
	Bottom	10,850	10,650	9,700	5,150	63
Apr. 15 11:01AM (12A)	Surface					7
	Mid-depth					13
	Bottom					17
Apr. 16 11:44AM (12A)	Surface					4
	Mid-depth					4
	Bottom					7
Apr. 17 (a) 12:30PM	Surface	2				
	Mid-depth	3				
	Bottom	7				
(a) 1:25PM	Surface		3	3	3	3
	Mid-depth		3	4	3	3
	Bottom		2,200	3	640	3
Apr. 18 (d) 1:12PM (12A)	Surface					7
	Mid-depth					6
	Bottom					5

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million				
		8	9	10	11	12
1938						
Apr. 18 (a)	Surface	9	7	3	2	8
1:35PM	Mid-depth	5	3	1	3	4
	Bottom	3	3	3	3	6
Apr. 19 (d)	Surface					6
2:02PM (12A)	Mid-depth					4
	Bottom					3
(a)	Surface	3	2	2	2	3
2:25PM	Mid-depth	5	2	9	5	5
	Bottom	9	2	6	4	13
Apr. 20 (d)	Surface					3
2:56PM (12A)	Mid-depth					2
	Bottom					3
(a)	Surface	2	3	2	2	3
3:20PM	Mid-depth	6	3	1	3	2
	Bottom	15	4	4	6	8
Apr. 23 (a)	Surface		2			
5:00AM	Mid-depth		2			
	Bottom		3			
(a)	Surface		2			
5:15AM	Mid-depth		1			
	Bottom		2			
(a)	Surface		2			
5:30AM	Mid-depth		3			
	Bottom		2			
(a)	Surface		2			
5:45AM	Mid-depth		2			
	Bottom		3			
(a)	Surface		3			
6:00AM	Mid-depth		2			
	Bottom		3			
Apr. 24 (a)	Surface		2			
6:00AM	Mid-depth		4			
	Bottom		2			
(a)	Surface		2			
6:15AM	Mid-depth		1			
	Bottom		2			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1938						
Apr. 24 (a)	Surface		5			
6:30M	Mid-depth		2			
	Bottom		3			
(a)	Surface		2			
6:45M	Mid-depth		2			
	Bottom		2			
(a)	Surface		6			
7:00M	Mid-depth		2			
	Bottom		2			
Apr. 25	Surface	3	8	3	4	3
7:10M	Mid-depth	3	2	2	3	3
	Bottom	2	2	2	3	2
Apr. 26	Surface	2	2	1	2	2
7:55M	Mid-depth	3	1	2	2	2
	Bottom	3	5	3	3	4
Apr. 27 (a)	Surface		4			
8:30M	Mid-depth		4			
	Bottom		1,040			
(a)	Surface		5			
8:45M	Mid-depth		8			
	Bottom		7,300			
(a)	Surface					
9:00M	Mid-depth		9			
	Bottom		3			
(a)	Surface		9,200			
9:15M	Mid-depth		6			
	Bottom		5			
Apr. 28 (a)	Surface		4			
9:15M	Mid-depth		15			
	Bottom		9,750			
(a)	Surface		5			
9:30M	Mid-depth		31			
	Bottom		9,800			
(a)	Surface		8			
9:45M	Mid-depth		19			
	Bottom		10,050			

Table 2 (continued) Tide cycle: hi h tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
Apr. 28 (a)	Surface		8			
10:00A	Mid-depth		6			
	Bottom		10,450			
Apr. 29	Surface					32
9:46A (12A)	Mid-depth					320
	Bottom					6,950
Apr. 30 (a)	Surface		57			
10:45A	Mid-depth		6,650			
	Bottom		11,850			
(a)	Surface		59			
11:00A	Mid-depth		11,400			
	Bottom		12,000			
(a)	Surface		138			
11:15A	Mid-depth		10,050			
	Bottom		12,650			
(a)	Surface		57			
11:30	Mid-depth		7,450			
	Bottom		12,800			
May 1 (a)	Surface		15			
11:30A	Mid-depth		170			
	Bottom		6,550			
(a)	Surface		18			
11:45A	Mid-depth		6,600			
	Bottom		11,850			
(a)	Surface		18			
12:00AM	Mid-depth		6,450			
	Bottom		12,150			
May 1 (a)	Surface		13			
12:15P	Mid-depth		7,200			
	Bottom		12,250			
May 2 (a)	Surface		130			
12:15PM	Mid-depth		6,700			
	Bottom		10,450			
(a)	Surface		67			
12:30PM	Mid-depth		4,950			
	Bottom		10,900			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
May 2 (a) 12:45PM	Surface		93			
	Mid-depth		7,600			
	Bottom		11,100			
(a) 1:00PM	Surface		151			
	Mid-depth		6,800			
	Bottom		11,650			
May 3 (a) 1:15PM	Surface		118			
	Mid-depth		11,100			
	Bottom		13,000			
(a) 1:30PM	Surface		133			
	Mid-depth		11,900			
	Bottom		12,800			
(a) 1:45PM	Surface		140			
	Mid-depth		12,450			
	Bottom		12,600			
(a) 2:00PM	Surface		174			
	Mid-depth		9,850			
	Bottom		12,700			
May 4 (a) 2:19PM	Surface	8,350	230	280	250	260
	Mid-depth	8,750	9,100	9,250	7,450	310
	Bottom	12,700	11,800	12,100	12,300	3,850
(a) 3:04PM	Surface					650
	Mid-depth					1,060
	Bottom					10,900
May 5 (a) 3:15PM	Surface		300			
	Mid-depth		12,700			
	Bottom		12,850			
(a) 3:30PM	Surface		350			
	Mid-depth		12,950			
	Bottom		13,100			
(a) 3:45PM	Surface		350			
	Mid-depth		13,050			
	Bottom		13,450			
(a) 4:00PM	Surface		370			
	Mid-depth		12,950			
	Bottom		13,650			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
May 6 (a) 4:15PM.	Surface		1,780			
	Mid-depth		10,200			
	Bottom		9,650			
(a) 4:30PM.	Surface		1,450			
	Mid-depth		9,350			
	Bottom		9,750			
(a) 4:45PM.	Surface		2,000			
	Mid-depth		10,200			
	Bottom		11,250			
(a) 5:00PM.	Surface		3,900			
	Mid-depth		10,800			
	Bottom		10,800			
May 7 (a) 5:15PM.	Surface		360			
	Mid-depth		10,300			
	Bottom		10,250			
(a) 5:30PM.	Surface		270			
	Mid-depth		9,450			
	Bottom		10,050			
(a) 5:45PM.	Surface		250			
	Mid-depth		9,250			
	Bottom		10,000			
(a) 6:00PM.	Surface		670			
	Mid-depth		9,950			
	Bottom		10,400			
May 8 (a) 5:45AM.	Surface		5,950			
	Mid-depth		11,050			
	Bottom		10,800			
(a) 6:00AM.	Surface		2,150			
	Mid-depth		11,150			
	Bottom		11,600			
(a) 6:15AM.	Surface		1,650			
	Mid-depth		10,800			
	Bottom		11,200			
(a) 6:30AM.	Surface		2,600			
	Mid-depth		11,000			
	Bottom		13,650			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
May 9 (a) 6:45	Surface		1,650			
	Mid-depth		10,600			
	Bottom		12,400			
(a) 7:00AM	Surface		2,750			
	Mid-depth		11,600			
	Bottom		12,450			
(a) 7:15AM	Surface		4,650			
	Mid-depth		12,300			
	Bottom		13,400			
(a) 7:30AM	Surface		6,050			
	Mid-depth		11,650			
	Bottom		12,000			
May 10 (a) 7:51AM	Surface	9,300	1,200	2,700	1,640	940
	Mid-depth	12,200	10,300	12,100	10,900	4,200
	Bottom	13,050	12,700	12,500	13,000	10,050
(a) 8:36AM	Surface					1,000
	Mid-depth					4,450
	Bottom					12,650
May 11 9:42AM	Surface	750	1,110	1,300	1,300	1,700
	Mid-depth	12,500	12,400	12,650	13,000	5,650
	Bottom	13,400	13,450	13,500	14,000	12,100
May 12 9:30AM	Surface	5,000	5,000	1,150	950	750
	Mid-depth	7,850	8,100	7,450	7,300	6,700
	Bottom	10,750	12,900	13,300	13,200	13,500
May 13 10:00AM	Surface		1,800			
	Mid-depth		8,900			
	Bottom		12,100			
(a) 10:15AM	Surface		1,950			
	Mid-depth		9,650			
	Bottom		12,750			
(a) 10:30AM	Surface		1,850			
	Mid-depth		11,100			
	Bottom		13,200			
(a) 10:45AM	Surface		1,920			
	Mid-depth		11,750			
	Bottom		13,250			

Table 2 (continued) Tide cycle: high tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
May 14	Surface					590
10:40AM (12A)	Mid-depth					8,300
	Bottom					9,800
May 15	Surface					1,700
11:22AM (12A)	Mid-depth					1,950
	Bottom					9,700
May 16	Surface					202
12:05PM (12A)	Mid-depth					2,840
	Bottom					9,000
May 17	Surface					11
12:50PM (12A)	Mid-depth					16
	Bottom					21
May 18 (a)	Surface	27	24	8	12	19
1:51PM	Mid-depth	450	51	61	15	20
	Bottom	11,350	10,350	7,550	4,000	24
(a)	Surface					43
2:36PM	Mid-depth					82
	Bottom					330
May 19	Surface					32
2:23PM (12A)	Mid-depth					300
	Bottom					2,920
May 20	Surface					155
3:15PM (12A)	Mid-depth					940
	Bottom					6,650
May 21	Surface					74
4:05PM (12A)	Mid-depth					5,350
	Bottom					11,500
May 22	Surface					320
4:11PM (12A)	Mid-depth					820
	Bottom					8,750
May 23	Surface					250
5:06AM (12A)	Mid-depth					2,450
	Bottom					10,450
May 24	Surface					294
5:59AM (12A)	Mid-depth					450
	Bottom					9,800

Table 2 (continued) Tide cycle: hi h ide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 25 6:51M (12A)	Surface					17
	Mid-depth					12
	Bottom					15
May 26 7:41M (12A)	Surface					22
	Mid-depth					1,060
	Bottom					3,850
May 27 8:31M (12A)	Surface					1,950
	Mid-depth					19
	Bottom					5,700
May 28 9:20AM (12A)	Surface					64
	Mid-depth					2,300
	Bottom					7,950
May 29 10:11AM (12A)	Surface					55
	Mid-depth					4,250
	Bottom					10,500
May 30 11:01AM (12A)	Surface					360
	Mid-depth					6,000
	Bottom					12,500
May 31 11:54AM (12A)	Surface					770
	Mid-depth					2,750
	Bottom					9,100
June 1 12:51PM (12A)	Surface					1,660
	Mid-depth					9,100
	Bottom					12,600
June 2 1:48PM (12A)	Surface					1,900
	Mid-depth					5,700
	Bottom					10,900
June 3 2:49PM (12A)	Surface					2,650
	Mid-depth					8,100
	Bottom					11,000
June 4 3:51PM (12A)	Surface					3,050
	Mid-depth					11,550
	Bottom					12,800
June 5 4:52PM (12A)	Surface					4,050
	Mid-depth					13,150
	Bottom					14,100

Table 2 (continued) Tide cycle: High tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
June 6	Surface	3,000	6,300			
5:14PM	Mid-depth	11,350	11,700			
	Bottom	12,400	12,900			
June 7	Surface	2,850	5,300			
6:15PM	Mid-depth	12,700	10,400			
	Bottom	13,100	12,500			
July 8	Surface		2,300			
8:41PM (9A)	Mid-depth		11,400			
	Bottom		13,750			
July 10	Surface		5,750			
10:11AM (9A)	Mid-depth		12,200			
	Bottom		14,400			
July 11	Surface		5,100			
10:51AM (9A)	Mid-depth		14,100			
	Bottom		14,350			
July 12	Surface		5,250			
11:36AM (9A)	Mid-depth		14,200			
	Bottom		14,850			
July 13	Surface		2,050			
12:06PM (9A)	Mid-depth		13,450			
	Bottom		14,300			
July 14	Surface		1,650			
12:01PM (9A)	Mid-depth		11,400			
	Bottom		13,400			
July 15	Surface		1,350			
1:21PM (9A)	Mid-depth		10,600			
	Bottom		13,500			
July 16	Surface		1,450			
2:01PM (9A)	Mid-depth		13,250			
	Bottom		13,950			
July 17	Surface		2,300			
2:41PM (9A)	Mid-depth		14,000			
	Bottom					
July 18	Surface		6,850			
3:16PM (9A)	Mid-depth		13,200			
	Bottom		13,400			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
July 19	Surface		2,150			
4:06PM (9A)	Mid-depth		14,500			
	Bottom		14,800			
July 20	Surface		1,100			
4:26PM (9A)	Mid-depth		8,950			
	Bottom		13,700			
July 21	Surface		1,100			
5:31PM (9A)	Mid-depth		7,400			
	Bottom		13,700			
July 23	Surface		11			
7:31AM	Mid-depth		10			
	Bottom		13			
July 24 (d)	Surface					7
7:45AM (12A)	Mid-depth					9
	Bottom					9
(a)	Surface		5			
8:01AM (9A)	Mid-depth		8			
	Bottom		9			
July 25 (d)	Surface					9
8:49AM (12A)	Mid-depth					5
	Bottom					6
(a)	Surface		6			
9:06AM (9A)	Mid-depth		6			
	Bottom		5			
July 26 (d)	Surface					6
9:35AM (12A)	Mid-depth					7
	Bottom					10
(a)	Surface		5			
10:15AM (9A)	Mid-depth		5			
	Bottom		14			
July 27 (d)	Surface					15
10:30AM (12A)	Mid-depth					55
	Bottom					500
(a)	Surface		25			
11:05AM (9A)	Mid-depth		110			
	Bottom		10,550			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million				
		8	9	10	11	12
1958						
July 28 (d) 11:21AM. (12L)	Surface					52
	Mid-depth					1,250
	Bottom					9,300
(a) 12:00M. (9L)	Surface		1,482			
	Mid-depth		10,200			
	Bottom		12,100			
July 29 (d) 12:11PM. (12L)	Surface					300
	Mid-depth					4,300
	Bottom					11,170
(a) 12:55PM (9L)	Surface		480			
	Mid-depth		9,450			
	Bottom		10,450			
July 30 (d) 1:04PM (12L)	Surface					104
	Mid-depth					2,800
	Bottom					10,700
(a) 1:50PM. (9L)	Surface		550			
	Mid-depth		5,300			
	Bottom		13,800			
July 31 (d) 1:58PM (12L)	Surface					9
	Mid-depth					11
	Bottom					15
(a) 2:40PM. (9L)	Surface		35			
	Mid-depth		4			
	Bottom		10,300			
Aug. 1 (d) 2:56PM. (12L)	Surface					23
	Mid-depth					1,010
	Bottom					4,100
(a) 3:30PM. (9L)	Surface		263			
	Mid-depth		730			
	Bottom		10,700			
Aug. 2 (d) 3:53PM (12L)	Surface					50
	Mid-depth					490
	Bottom					9,150
(a) 4:25PM. (9L)	Surface		40			
	Mid-depth		3,650			
	Bottom		12,350			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Aug. 3 (d)	Surface					83
4:52PM (12.)	Mid-depth					850
	Bottom					10,000
(a)	Surface		77			
5:15PM (9.)	Mid-depth		1,450			
	Bottom		12,150			
Aug. 4 (d)	Surface					10
5:20AM (12.)	Mid-depth					11
	Bottom					14
(a)	Surface		55			
6:05PM (9.)	Mid-depth		1,950			
	Bottom		10,900			
Aug. 5	Surface		8			
6:55AM (9.)	Mid-depth		29			
	Bottom		8,000			
Aug. 6 (d)	Surface					41
7:21AM (12.)	Mid-depth					1,600
	Bottom					8,950
	Surface		78			
8:15AM (9.)	Mid-depth		4,500			
	Bottom		11,350			
Aug. 7 (d)	Surface					400
8:12AM (12.)	Mid-depth					6,650
	Bottom					9,700
	Surface		600			
8:50AM (9.)	Mid-depth		5,050			
	Bottom		12,100			
Aug. 8 (d)	Surface					460
9:35AM (12.)	Mid-depth					6,750
	Bottom					11,000
	Surface		930			
9:40PM (9.)	Mid-depth		11,350			
	Bottom		13,150			
Aug. 9 (d)	Surface					610
9:36PM (12.)	Mid-depth					7,800
	Bottom					11,000

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Aug. 9 10:30AM (9A)	Surface		1,750			
	Mid-depth		7,300			
	Bottom		13,900			
Aug. 10 (d) 10:11AM (12A)	Surface					660
	Mid-depth					4,950
	Bottom					12,500
(a) 10:55AM (9A)	Surface		1,790			
	Mid-depth		8,100			
	Bottom		12,100			
Aug. 11 (d) 10:47AM (12A)	Surface					1,550
	Mid-depth					6,800
	Bottom					9,150
(a) 11:00AM (9A)	Surface		1,280			
	Mid-depth		8,250			
	Bottom		11,950			
Aug. 12 (d) 11:24AM (12A)	Surface					95
	Mid-depth					5,160
	Bottom					7,950
(a) 12:00AM (9A)	Surface		530			
	Mid-depth		7,300			
	Bottom		12,450			
Aug. 13 (d) 12:00AM (12A)	Surface					410
	Mid-depth					7,850
	Bottom					12,350
(a) 12:35PM (9A)	Surface		670			
	Mid-depth		7,300			
	Bottom		13,250			
Aug. 14 (d) 12:38AM (12A)	Surface					1,020
	Mid-depth					6,450
	Bottom					9,850
(a) 1:20PM (9A)	Surface		1,280			
	Mid-depth		12,500			
	Bottom		14,300			
Aug. 15 (d) 1:16PM (12A)	Surface					2,350
	Mid-depth					11,000
	Bottom					13,750

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Aug. 15 (a) 2:00PM	Surface		2,450			
	Mid-depth		13,500			
	Bottom		14,400			
Aug. 16 (d) 1:59PM (12A)	Surface					2,110
	Mid-depth					5,400
	Bottom					11,550
(a) 2:31PM	Surface		6,150			
	Mid-depth		12,300			
	Bottom		14,450			
Aug. 17 (d) 2:51PM (12A)	Surface					1,360
	Mid-depth					12,100
	Bottom					13,700
(a) 3:05PM	Surface		3,100			
	Mid-depth		13,450			
	Bottom		13,400			
Aug. 18 (d) 3:46PM (12A)	Surface					1,330
	Mid-depth					10,400
	Bottom					11,650
(a) 4:25PM	Surface		2,400			
	Mid-depth		14,000			
	Bottom		14,500			
Aug. 19 (d) 4:48PM (12A)	Surface					2,250
	Mid-depth					12,150
	Bottom					14,250
(a) 5:35PM	Surface		2,200			
	Mid-depth		14,800			
	Bottom		14,650			
Aug. 20 (d) 5:53PM (12A)	Surface					2,350
	Mid-depth					12,800
	Bottom					14,350
(a) 6:45PM	Surface		2,550			
	Mid-depth		14,050			
	Bottom		14,450			
Aug. 21 (d) 6:58AM (12A)	Surface					1,030
	Mid-depth					3,850
	Bottom					6,250

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Aug. 21 (a) 7:05AM	Surface		1,600			
	Mid-depth		12,450			
	Bottom		13,850			
Aug. 22 (d) 7:54AM (12A)	Surface					1,480
	Mid-depth					9,400
	Bottom					13,300
(a) 8:25AM	Surface		2,350			
	Mid-depth		13,250			
	Bottom		14,400			
Aug. 23 (d) 8:50AM (12A)	Surface					2,500
	Mid-depth					11,200
	Bottom					14,450
(a) 9:20AM (9A)	Surface		3,050			
	Mid-depth		13,000			
	Bottom		15,100			
Aug. 24 (d) 9:42AM (12A)	Surface					3,250
	Mid-depth					7,350
	Bottom					14,100
(a) 9:45AM (9A)	Surface		4,150			
	Mid-depth		12,150			
	Bottom		14,350			
Aug. 25 (d) 10:35AM (12A)	Surface					3,700
	Mid-depth					13,900
	Bottom					15,000
(a) 11:05AM (9A)	Surface		4,300			
	Mid-depth		13,400			
	Bottom		15,400			
Aug. 26 (d) 11:23AM (12A)	Surface					4,100
	Mid-depth					11,150
	Bottom					15,150
(a) 11:50AM (9A)	Surface		5,750			
	Mid-depth		14,650			
	Bottom		15,850			
Aug. 27 (d) 12:10PM (12A)	Surface					4,450
	Mid-depth					14,650
	Bottom					15,250

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Aug. 27 (a)	Surface		7,050			
12:35P (9.)	Mid-depth		14,650			
	Bottom		15,750			
Aug. 28 (d)	Surface					2,410
12:59PM (12.)	Mid-depth					12,100
	Bottom					13,500
(a)	Surface		3,700			
1:30PM (9.)	Mid-depth		8,800			
	Bottom		11,700			
Aug. 29	Surface		12,050			
2:05PM (9.)	Mid-depth		14,450			
	Bottom		15,750			
Aug. 30	Surface		3,250			
3:00P (9.)	Mid-depth		15,400			
	Bottom		13,750			
Aug. 31	Surface		4,950			
3:55P (9.)	Mid-depth		14,250			
	Bottom		14,850			
Sept. 1	Surface		1,900			
4:50P (9.)	Mid-depth		10,450			
	Bottom		12,600			
Sept. 2	Surface		3,850			
5:41PM (9.)	Mid-depth		11,500			
	Bottom		11,900			
Sept. 3	Surface		2,750			
6:40.M (9.)	Mid-depth		7,550			
	Bottom		13,400			
Sept. 4	Surface		3,050			
7:45AM (9.)	Mid-depth		8,500			
	Bottom		13,100			
Sept. 5	Surface		4,200			
8:40AM (9.)	Mid-depth		12,400			
	Bottom		14,450			
Sept. 7	Surface		12,500			
9:55A (9.)	Mid-depth		15,800			
	Bottom		14,700			

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Sept. 8 10:35M (9A)	Surface		6,950			
	Mid-depth		12,700			
	Bottom		14,700			
Sept. 9 11:05M (9A)	Surface		6,200			
	Mid-depth		14,900			
	Bottom		13,400			
Sept.10 11:30M (9A)	Surface		6,850			
	Mid-depth		13,700			
	Bottom		14,900			
Sept.11 12:05P (9A)	Surface		9,750			
	Mid-depth		14,500			
	Bottom		15,550			
Sept.12 12:20PM (9A)	Surface		11,650			
	Mid-depth		15,850			
	Bottom		16,150			
Sept.13 1:10M (9A)	Surface		10,400			
	Mid-depth		14,350			
	Bottom		15,500			
Sept.14 2:00PM (9A)	Surface		13,800			
	Mid-depth		16,050			
	Bottom		16,200			
Sept.15 3:15PM (9A)	Surface		4,300			
	Mid-depth		11,200			
	Bottom		11,800			
Sept.16 4:00PM (9A)	Surface		2,000			
	Mid-depth		13,450			
	Bottom		15,250			
Sept.17 5:30PM (9A)	Surface		2,500			
	Mid-depth		11,000			
	Bottom		13,500			
Sept.18 (a) 5:55A (9A)	Surface		3,900			
	Mid-depth		8,600			
	Bottom		12,850			
(a) 6:05A	Surface		700		2,450	
	Mid-depth		12,900		12,100	
	Bottom		11,300		11,750	

Table 2 (continued) Tide cycle: high tide to one hour after

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1938						
Sept.19 (d)	Surface					90
6:14P (12.)	Mid-depth					173
	Bottom					9,000
(a)	Surface		1,250			
6:50P (9.)	Mid-depth		4,050			
	Bottom		11,550			
Sept.20 (d)	Surface					24
7:14P (12.)	Mid-depth					24
	Bottom					50
(a)	Surface		14			
8:10P (9.)	Mid-depth		58			
	Bottom					
Sept.21	Surface					5
8:06P (12.)	Mid-depth					6
	Bottom					6
Sept.22	Surface					10
9:06P (12.)	Mid-depth					10
	Bottom					6
Sept.26	Surface		3			
1:00P (9.)	Mid-depth					
	Bottom					
Sept.28	Surface		17			
2:15P (9.)	Mid-depth		3			
	Bottom		6			
Sept.29	Surface		3			
3:45P (9.)	Mid-depth		4			
	Bottom		4			
Sept.30	Surface		28			
4:15P (9.)	Mid-depth		240			
	Bottom		1,040			

Table 3 Tide cycle: 1-2 hours after high tide

Parts per million

Date	Position	Stations 8	9	10	11	12
1937						
Nov. 16 (a) 9:34AM	Surface		7			
	Mid-depth		5			
	Bottom		11			
(a) 9:44AM	Surface		7			
	Mid-depth		7			
	Bottom		9			
(a) 9:54AM	Surface		7			
	Mid-depth		9			
	Bottom		7			
(a) 10:04AM	Surface		7			
	Mid-depth		7			
	Bottom		5			
(a) 10:14AM	Surface		7			
	Mid-depth		5			
	Bottom		7			
(a) 10:24AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
Nov. 17 (a) 10:26AM	Surface		13			
	Mid-depth		33			
	Bottom		69			
(a) 10:41AM	Surface		11			
	Mid-depth		105			
	Bottom		163			
(a) 10:56AM	Surface		11			
	Mid-depth		121			
	Bottom		280			
(a) 11:11AM	Surface		19			
	Mid-depth		81			
	Bottom		137			
(a) 11:26AM	Surface		117			
	Mid-depth		77			
	Bottom		121			
Nov. 18 (a) 11:15AM	Surface		91			
	Mid-depth		6,950			
	Bottom		7,600			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 18 (a) 11:30AM	Surface		5,300			
	Mid-depth		230			
	Bottom		6,700			
(a) 11:45AM	Surface		55			
	Mid-depth		1,060			
	Bottom		1,480			
(a) 12:00AM	Surface		5,800			
	Mid-depth		1,640			
	Bottom		2,360			
(a) 11:45PM	Surface		17			
	Mid-depth		93			
	Bottom		5,300			
(a) 12:00PM	Surface		11			
	Mid-depth		61			
	Bottom		5,100			
Nov. 19 (a) 12:15AM	Surface		36			
	Mid-depth		820			
	Bottom		1,500			
(a) 12:00AM	Surface		113			
	Mid-depth		8,000			
	Bottom		8,500			
(a) 12:15PM	Surface		1,380			
	Mid-depth		8,800			
	Bottom		9,300			
(a) 12:30PM	Surface		93			
	Mid-depth		9,000			
	Bottom		8,400			
(a) 12:45PM	Surface		89			
	Mid-depth		8,100			
	Bottom		7,300			
Nov. 20 (a) 12:45PM	Surface		990			
	Mid-depth		12,700			
	Bottom		13,100			
(a) 1:00PM	Surface		900			
	Mid-depth		4,400			
	Bottom		12,350			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 20 (a) 1:15PM	Surface		1,110			
	Mid-depth		9,900			
	Bottom		11,950			
(a) 1:30PM	Surface		360			
	Mid-depth		2,150			
	Bottom		10,200			
Nov. 21 (a) 12:45PM	Surface		290			
	Mid-depth		3,600			
	Bottom		13,050			
(a) 1:00PM	Surface		590			
	Mid-depth		4,950			
	Bottom		13,500			
(a) 1:15PM	Surface		610			
	Mid-depth		5,400			
	Bottom		13,450			
(a) 1:30PM	Surface		230			
	Mid-depth		1,020			
	Bottom		13,400			
Nov. 22 (a) 2:45PM	Surface		320			
	Mid-depth		8,300			
	Bottom		9,400			
(a) 3:00PM	Surface		320			
	Mid-depth		7,800			
	Bottom		9,700			
Nov. 23 (a) 3:30PM	Surface		360			
	Mid-depth		2,900			
	Bottom		10,700			
(a) 3:45PM	Surface		1,460			
	Mid-depth		3,500			
	Bottom		10,800			
(a) 4:00PM	Surface		780			
	Mid-depth		3,400			
	Bottom		10,800			
(a) 4:15PM	Surface		760			
	Mid-depth		5,900			
	Bottom		11,100			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 26 (a) 6:45AM	Surface		540			
	Mid-depth		400			
	Bottom		4,600			
(a) 7:00AM	Surface		1,000			
	Mid-depth		710			
	Bottom		2,900			
(a) 7:15AM	Surface		940			
	Mid-depth		4,400			
	Bottom		14,500			
(a) 7:30AM	Surface		6,900			
	Mid-depth		1,250			
	Bottom		1,400			
Nov. 27 (a) 7:30AM	Surface		9,100			
	Mid-depth		11,200			
	Bottom		11,700			
(a) 7:45AM	Surface		7,150			
	Mid-depth		10,300			
	Bottom		12,200			
(a) 8:00AM	Surface		6,100			
	Mid-depth		11,100			
	Bottom		11,700			
(a) 8:15AM	Surface		8,800			
	Mid-depth		11,800			
	Bottom		11,900			
Nov. 29 (a) 9:15AM	Surface		11			
	Mid-depth		9			
	Bottom		19			
(a) 9:30AM	Surface		9			
	Mid-depth		11			
	Bottom		11			
(a) 9:45AM	Surface		7			
	Mid-depth		7			
	Bottom		11			
(a) 10:00AM	Surface		9			
	Mid-depth		9			
	Bottom		7			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1937						
Nov. 30 (a) 9:45AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 10:00AM	Surface		7			
	Mid-depth		5			
	Bottom		7			
(a) 10:15AM	Surface		5			
	Mid-depth		5			
	Bottom		3			
(a) 10:30AM	Surface		7			
	Mid-depth		5			
	Bottom		5			
(a) 10:45AM	Surface		7			
	Mid-depth		7			
	Bottom		5			
Dec. 2 (a) 11:15AM	Surface		5			
	Mid-depth		7			
	Bottom		5			
(a) 11:30AM	Surface		3			
	Mid-depth		9			
	Bottom		5			
(a) 11:45AM	Surface		3			
	Mid-depth		5			
	Bottom		3			
(a) 12:00AM	Surface		5			
	Mid-depth		5			
	Bottom		7			
Dec. 3 (a) 12:00 AM	Surface		21			
	Mid-depth		940			
	Bottom		13,000			
(a) 12:15PM	Surface		17			
	Mid-depth		2,600			
	Bottom		12,600			
(a) 12:30PM	Surface		15			
	Mid-depth		141			
	Bottom		12,100			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Dec. 3 (a) 12:45PM	Surface		9			
	Mid-depth		640			
	Bottom		12,100			
Dec. 4 (a) 1:45PM	Surface		280			
	Mid-depth		8,600			
	Bottom		8,650			
(a) 2:00PM	Surface		260			
	Mid-depth		310			
	Bottom		5,650			
Dec. 5 (a) 1:15PM	Surface		71			
	Mid-depth		7,500			
	Bottom		12,600			
(a) 1:30PM	Surface		33			
	Mid-depth		9,750			
	Bottom		12,750			
(a) 1:45PM	Surface		51			
	Mid-depth		9,650			
	Bottom		12,700			
(a) 2:00PM	Surface		7			
	Mid-depth		1,130			
	Bottom		11,750			
Dec. 6 (a) 1:45PM	Surface		980			
	Mid-depth		5,200			
	Bottom		13,600			
(a) 2:00PM	Surface		760			
	Mid-depth		7,000			
	Bottom		13,700			
(a) 2:15PM	Surface		680			
	Mid-depth		8,900			
	Bottom		13,300			
Dec. 7 (a) 2:45PM	Surface		7			
	Mid-depth		67			
	Bottom		125			
(a) 3:00PM	Surface		15			
	Mid-depth		9			
	Bottom		17			

Table 5 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1937						
Dec. 7 (a) 3:15PM	Surface		23			
	Mid-depth		9			
	Bottom		97			
(a) 3:30PM	Surface		9			
	Mid-depth		9			
	Bottom		89			
(a) 3:45PM	Surface		13			
	Mid-depth		7			
	Bottom		13			
Dec. 8 (a) 3:30PM	Surface		11			
	Mid-depth		24			
	Bottom		81			
(a) 3:45PM	Surface		11			
	Mid-depth		12			
	Bottom		91			
(a) 4:00PM	Surface		10			
	Mid-depth		53			
	Bottom		63			
Dec. 9 4:00PM	Surface		4			
	Mid-depth		171			
Dec. 10 5:00PM	Surface		57			
	Mid-depth		716			
	Bottom		1,300			
Dec. 13 (a) 7:30AM	Surface		1,000			
	Mid-depth		11,100			
	Bottom		10,600			
(a) 7:45AM	Surface		700			
	Mid-depth		7,100			
	Bottom		11,000			
(a) 8:00AM	Surface		700			
	Mid-depth		8,000			
	Bottom		10,700			
(a) 8:30AM	Surface		660			
	Mid-depth		6,900			
	Bottom		8,000			

Table 5 (continued) Tide cycle: 1-2 hours af or high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 14 (a) 8:15 M	Surface		7,200			
	Mid-depth		11,000			
	Bottom		11,700			
(a) 8:30 M	Surface		9,500			
	Mid-depth		10,900			
	Bottom		10,700			
(a) 8:45 M	Surface		8,400			
	Mid-depth		10,100			
	Bottom		10,300			
(a) 9:00 M	Surface		2,300			
	Mid-depth		[illegible],700			
	Bottom		8,800			
(a) 9:15 M	Surface		360			
	Mid-depth		8,000			
	Bottom		7,600			
Dec. 15 (a) 9:15 M	Surface		8,300			
	Mid-depth		11,600			
	Bottom		12,200			
(a) 9:30 M	Surface		8,900			
	Mid-depth		11,100			
	Bottom		11,000			
(a) 9:45 M	Surface		8,700			
	Mid-depth		12,600			
	Bottom		13,600			
(a) 10:00 M	Surface		8,700			
	Mid-depth		11,700			
	Bottom		13,600			
(a) 10:15 M	Surface		4,400			
	Mid-depth		11,700			
	Bottom		9,200			
Dec. 16 (a) 10:00 M	Surface		7,900			
	Mid-depth		11,300			
	Bottom		11,650			
(a) 10:15 M	Surface		7,700			
	Mid-depth		13,000			
	Bottom		13,400			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1937						
Dec. 16 (a) 10:30 A	Surface		7,800			
	Mid-depth		13,000			
	Bottom		13,600			
(a) 10:45 A	Surface		7,500			
	Mid-depth		12,900			
	Bottom		13,200			
(a) 11:00 A	Surface		4,800			
	Mid-depth		9,500			
	Bottom		[illegible],400			
Dec. 17 (a) 10:45 A	Surface		4,800			
	Mid-depth		14,000			
	Bottom		14,300			
(a) 11:00 A	Surface		7,600			
	Mid-depth		14,500			
	Bottom		14,900			
(a) 11:15 A	Surface		5,100			
	Mid-depth		13,300			
	Bottom		13,000			
(a) 11:30 A	Surface		5,000			
	Mid-depth		13,100			
	Bottom		13,700			
Dec. 18 (a) 11:45 A	Surface		6,000			
	Mid-depth		13,100			
	Bottom		13,600			
(a) 12:00 M	Surface		5,600			
	Mid-depth		13,300			
	Bottom		13,000			
(a) 12:15 P	Surface		1,900			
	Mid-depth		11,200			
	Bottom		11,300			
(a) 12:30 P	Surface		1,850			
	Mid-depth		[illegible],700			
	Bottom		10,500			
Dec. 20 (a) 1:30 P	Surface		250			
	Mid-depth		11,[illegible]00			
	Bottom		[illegible],900			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 20 (a) 1:45PM	Surface		125			
	Mid-depth		10,500			
	Bottom		13,400			
(a) 2:00PM	Surface		193			
	Mid-depth		1,000			
	Bottom		12,800			
(a) 2:15PM	Surface		51			
	Mid-depth		1,400			
	Bottom		2,100			
(a) 2:30PM	Surface		29			
	Mid-depth		129			
	Bottom		160			
Dec. 21 2:40PM	Surface	135	53		57	
	Mid-depth	620	12,500		12,300	
	Bottom	10,000	13,500		97	
Dec. 23 4:25PM	Surface	13	13		15	
	Mid-depth	29	21		19	
	Bottom	2,500	4,300		29	
Dec. 28 (a) 9:25AM	Surface	7,650	3,050		4,750	
	Mid-depth	10,800	14,100		13,500	
	Bottom	13,200	14,300		13,600	
(a) 9:40AM	Surface	7,500				
	Mid-depth	13,700				
	Bottom	12,400				
(a) 10:55AM	Surface	1,600	10,050		2,100	
	Mid-depth	2,300	10,600		9,300	
	Bottom	9,800	11,300		10,700	
1938						
Jan. 14 (a) 9:50AM	Surface		5,200			
	Mid-depth		13,500			
	Bottom		15,400			
(a) 10:00AM	Surface		6,300			
	Mid-depth		15,300			
	Bottom		15,000			

Table 5 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 14 (a) 10:10AM	Surface		6,200			
	Mid-depth		14,650			
	Bottom		15,200			
(a) 10:20AM	Surface		6,800			
	Mid-depth		14,450			
	Bottom		14,700			
(a) 10:30AM	Surface		6,200			
	Mid-depth		14,000			
	Bottom		13,600			
(a) 10:40AM	Surface		5,100			
	Mid-depth		13,100			
	Bottom		14,000			
(a) 10:50AM	Surface		2,950			
	Mid-depth		12,900			
	Bottom		12,700			
Jan. 15 (a) 10:50AM	Surface		2,400			
	Mid-depth		14,850			
	Bottom		15,400			
(a) 11:00AM	Surface		2,550			
	Mid-depth		13,250			
	Bottom		15,300			
(a) 11:10AM	Surface		2,550			
	Mid-depth		14,400			
	Bottom		15,250			
(a) 11:20AM	Surface		3,000			
	Mid-depth		8,200			
	Bottom		14,950			
(a) 11:30AM	Surface		2,500			
	Mid-depth		3,400			
	Bottom		14,450			
(a) 11:40AM	Surface		2,750			
	Mid-depth		5,100			
	Bottom		14,500			
Jan. 16 (a) 11:30AM	Surface		2,100			
	Mid-depth		14,700			
	Bottom		15,700			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1958						
Jan. 16 (a) 11:40A	Surface		2,250			
	Mid-depth		13,700			
	Bottom		13,550			
(a) 11:50A	Surface		1,400			
	Mid-depth		10,450			
	Bottom		10,250			
(a) 12:00N	Surface		2,850			
	Mid-depth		9,750			
	Bottom		12,600			
(a) 12:10P	Surface		1,100			
	Mid-depth		7,200			
	Bottom		10,200			
(a) 12:20P	Surface		1,400			
	Mid-depth		9,900			
	Bottom		10,600			
Jan. 17 (a) 12:30P	Surface		4,550			
	Mid-depth		8,600			
	Bottom		14,400			
(a) 12:40P	Surface		4,800			
	Mid-depth		14,600			
	Bottom		11,200			
(a) 12:50P	Surface		5,300			
	Mid-depth		13,900			
	Bottom		14,400			
(a) 1:00P	Surface		2,700			
	Mid-depth		14,300			
	Bottom		14,200			
(a) 1:10P	Surface		4,600			
	Mid-depth		14,100			
	Bottom		14,000			
(a) 1.20P	Surface		4,300			
	Mid-depth		6,850			
	Bottom		13,700			
Jan. 18 (a) 1:20P	Surface		3,600			
	Mid-depth		13,300			
	Bottom		13,700			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million				
		8	9	10	11	12
1938						
Jan. 18 (a) 1:30PM	Surface		1,700			
	Mid-depth		13,700			
	Bottom		13,400			
(a) 1:40PM	Surface		1,600			
	Mid-depth		13,400			
	Bottom		13,000			
(a) 1:50PM	Surface		2,100			
	Mid-depth		11,800			
	Bottom		13,850			
(a) 2:00PM	Surface		1,400			
	Mid-depth		12,300			
	Bottom		11,700			
(a) 2:10PM	Surface		1,200			
	Mid-depth		9,900			
	Bottom		9,900			
Jan. 19 (a) 2:00PM	Surface		1,250			
	Mid-depth		12,200			
	Bottom		13,600			
(a) 2:15PM	Surface		1,100			
	Mid-depth		11,100			
	Bottom		13,350			
(a) 2:30PM	Surface		1,300			
	Mid-depth		10,800			
	Bottom		11,600			
(a) 2:45PM	Surface		840			
	Mid-depth		9,600			
	Bottom		13,000			
(a) 3:00PM	Surface		760			
	Mid-depth		9,600			
	Bottom		12,600			
Jan. 20 3:00PM	Surface		1,250			
	Mid-depth		11,200			
	Bottom		11,250			
Jan. 26 (a) 8:15AM	Surface		6			
	Mid-depth		8			
	Bottom		7			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Jan. 26 (a) 8:30AM	Surface		8			
	Mid-depth		7			
	Bottom		7			
(a) 8:45AM	Surface		6			
	Mid-depth		5			
	Bottom		7			
(a) 9:00AM	Surface		6			
	Mid-depth		7			
	Bottom		6			
(a) 9:15AM	Surface		8			
	Mid-depth		17			
	Bottom		29			
Jan. 27 (a) 9:15AM	Surface		5			
	Mid-depth		5			
	Bottom		3			
(a) 9:30AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 9:45AM	Surface		3			
	Mid-depth		5			
	Bottom		5			
(a) 10:00AM	Surface		3			
	Mid-depth		3			
	Bottom		3			
Feb. 2 (a) 1:00PM	Surface		12			
	Mid-depth		740			
	Bottom		12,200			
(a) 1:15PM	Surface		7			
	Mid-depth		2,600			
	Bottom		12,600			
(a) 1:30PM	Surface		11			
	Mid-depth		2,000			
	Bottom		12,600			
(a) 1:45PM	Surface		19			
	Mid-depth		1,200			
	Bottom		12,100			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
Feb. 3 (a) 1:45PM	Surface		8			
	Mid-depth		2,900			
	Bottom		6,450			
(a) 2:00PM	Surface		11			
	Mid-depth		2,700			
	Bottom		7,450			
(a) 2:15PM	Surface		9			
	Mid-depth		2,850			
	Bottom		8,600			
(a) 2:30PM	Surface		20			
	Mid-depth		41			
	Bottom		4,150			
Feb. 4 (a) 2:15PM	Surface		13			
	Mid-depth		34			
	Bottom		11,050			
(a) 2:30PM	Surface		8			
	Mid-depth		1,770			
	Bottom		4,800			
(a) 2:45PM	Surface		16			
	Mid-depth		21			
	Bottom		10,450			
(a) 3:00PM	Surface		30			
	Mid-depth		3,800			
	Bottom		8,000			
(a) 3:15PM	Surface		7			
	Mid-depth		2,100			
	Bottom		690			
Feb. 11 (a) 8:45AM	Surface	31	17		67	
	Mid-depth	221	2,660		740	
	Bottom	13,250	13,400		13,300	
(a) 9:40AM	Surface				73	
	Mid-depth				92	
	Bottom				13,100	
Feb. 13 11:25AM	Surface				240	
	Mid-depth				730	
	Bottom				6,800	

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 14 (a) 11:20AM	Surface	320	320		220	
	Mid-depth	12,000	12,900		12,800	
	Bottom	14,200	13,800		13,900	
(a) 11:50AM	Surface	260	65		143	
	Mid-depth	520	12,000		12,000	
	Bottom	12,800	13,700		13,400	
(a) 12:15PM	Surface				400	
	Mid-depth				9,200	
	Bottom				12,300	
Feb. 15 (a) 12:20PM	Surface	141	71		45	
	Mid-depth	13,500	13,300		12,500	
	Bottom	13,750	13,800		14,300	
(a) 12:50PM	Surface	127	55		57	
	Mid-depth	12,300	13,200		9,300	
	Bottom	13,500	13,400		14,500	
Feb. 17 2:20PM	Surface	13	9		15	
	Mid-depth	33	71		540	
	Bottom	9,200	12,000		12,700	
Feb. 20 (a) 4:15PM	Surface		320			
	Mid-depth		13,500			
	Bottom		14,100			
(a) 4:30PM	Surface		480			
	Mid-depth		13,100			
	Bottom		14,500			
(a) 4:45PM	Surface		400			
	Mid-depth		13,950			
	Bottom		13,800			
(a) 5:00PM	Surface		320			
	Mid-depth		13,800			
	Bottom		14,400			
Feb. 25 (a) 8:30AM	Surface		720			
	Mid-depth		13,550			
	Bottom		13,900			
(a) 8:45AM	Surface		760			
	Mid-depth		13,550			
	Bottom		13,900			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Feb. 25 (a) 9:00M	Surface		840			
	Mid-depth		12,200			
	Bottom		13,600			
(a) 9:15M	Surface		1,080			
	Mid-depth		13,700			
	Bottom		13,350			
(a) 9:30M	Surface		1,200			
	Mid-depth		11,900			
	Bottom		13,400			
Feb. 26 (a) 9:30M	Surface		400			
	Mid-depth		13,000			
	Bottom		14,000			
(a) 9:45M	Surface		380			
	Mid-depth		13,400			
	Bottom		14,100			
(a) 10:00M	Surface		420			
	Mid-depth		13,500			
	Bottom		13,850			
Feb. 27 (a) 10:00M	Surface		1,450			
	Mid-depth		12,100			
	Bottom		13,400			
(a) 10:15M	Surface		1,980			
	Mid-depth		12,800			
	Bottom		13,500			
(a) 10:30M	Surface		1,530			
	Mid-depth		4,700			
	Bottom		13,400			
(a) 10:45M	Surface		1,320			
	Mid-depth		6,300			
	Bottom		11,500			
(a) 11:00M	Surface		1,380			
	Mid-depth		8,700			
	Bottom		11,700			
Feb. 28 10:45M	Surface	440	980		3,300	
	Mid-depth	11,200	10,000		9,300	
	Bottom	12,950	12,400		13,300	

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations				
		8	9	10	11	12
1938						
Mar. 1 (a) 11:20AM	Surface	4,600	3,500		8,750	
	Mid-depth	11,450	11,400		12,500	
	Bottom	9,800	11,900		12,400	
Mar. 7 4:05PM	Surface	35	38		45	
	Mid-depth	114	3,050		3,800	
	Bottom	2,050	10,950		6,100	
Mar. 27 (a) 8:45AM	Surface		6			
	Mid-depth		1			
	Bottom		1			
(a) 9:00AM	Surface		2			
	Mid-depth		2			
	Bottom		1			
(a) 9:15AM	Surface		1			
	Mid-depth		1			
	Bottom		2			
(a) 9:30AM	Surface		3			
	Mid-depth		6			
	Bottom		2			
Mar. 28 9:40AM	Surface	2	2	2	2	2
	Mid-depth	1	7	2	2	2
	Bottom	1	4	2	3	3
Mar. 29 (a) 10:15AM	Surface		1			
	Mid-depth		2			
	Bottom		3			
(a) 10:30AM	Surface		2			
	Mid-depth		4			
	Bottom		3			
(a) 10:45AM	Surface		2			
	Mid-depth		2			
	Bottom		3			
(a) 11:00AM	Surface		2			
	Mid-depth		2			
	Bottom		1			
Mar. 31 11:35AM	Surface	4	11	5	5	3
	Mid-depth	51	133	3	10	4
	Bottom	11,500	10,300	5,100	11,200	580

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Apr. 1 12:15PM	Surface	12	9	2	8	4
	Mid-depth	14	13	15	15	3
	Bottom	10,650	9,250	4,500	11,000	1,500
Apr. 3 1:45PM	Surface	9	5	3	5	100
	Mid-depth	55	33	3	15	233
	Bottom	5,450	5,600	91	6,000	400
Apr. 4 2:35PM	Surface	4	4	3	3	76
	Mid-depth	10	6	7	13	83
	Bottom	4,850	81	4	4,200	83
Apr. 5 3:35PM	Surface	6	12	4	3	90
	Mid-depth	33	25	3	22	142
	Bottom	11,050	10,050	123	6,250	142
Apr. 6 4:40PM	Surface	8	5	6	4	5
	Mid-depth	10	7	13	22	29
	Bottom	5,950	11,500	8,800	5,450	8,800
Apr. 7 5:45PM	Surface	16	15	11	18	10
	Mid-depth	3,000	2,650	2,700	1,670	13
	Bottom	13,900	12,800	7,500	7,450	2,070
Apr. 11 (a) 9:15AM	Surface	13	10	12	15	13
	Mid-depth	7,350	6,550	4,500	7,750	1,420
	Bottom	9,800	12,500	6,700-	13,000	12,000
(a) 10:00AM	Surface					15
	Mid-depth					260
	Bottom					8,800
Apr. 12 10:15AM	Surface	10	6	9	10	22
	Mid-depth	89	47	69	23	79
	Bottom	11,100	9,400	11,050	11,300	520
Apr. 13 10:55AM	Surface	19	8	11	14	129
	Mid-depth	4,500	6,150	8,050	39	280
	Bottom	11,800	11,550	5,950	11,150	370
Apr. 14 11:40AM	Surface	25	5	9	7	25
	Mid-depth	101	3,850	65	46	159
	Bottom	11,100	10,800	11,450	10,900	4,300
Apr. 17 (a) 1:30PM	Surface	3				
	Mid-depth	7				
	Bottom	9,300				

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Apr. 17 (a) 2:25PM	Surface	2	3	2	2	48
	Mid-depth	5	9	3	16	51
	Bottom	910	15	5	61	57
Apr. 18 (a) 2:35PM	Surface	3	2	3	2	3
	Mid-depth	4	4	2	3	4
	Bottom	3	7	3	4	5
(a) 3:25PM	Surface	3	2	2	3	2
	Mid-depth	2	2	3	4	3
	Bottom	2	2	2	5	3
Apr. 20 4:20PM	Surface	2	1	3	4	3
	Mid-depth	2	5	2	3	2
	Bottom	4	4	2	3	3
Apr. 23 (a) 6:15AM	Surface		5			
	Mid-depth		3			
	Bottom		2			
(a) 6:30AM	Surface		3			
	Mid-depth		1			
	Bottom		2			
(a) 6:45AM	Surface		4			
	Mid-depth		3			
	Bottom		2			
(a) 7:00AM	Surface		2			
	Mid-depth		3			
	Bottom		2			
Apr. 24 (a) 7:15AM	Surface		2			
	Mid-depth		1			
	Bottom		2			
(a) 7:30AM	Surface		2			
	Mid-depth		3			
	Bottom		2			
(a) 7:45AM	Surface		3			
	Mid-depth		1			
	Bottom		3			
(a) 8:00AM	Surface		2			
	Mid-depth		3			
	Bottom		3			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Apr. 25 (a)	Surface	2	2	1	4	1
8:10AM	Mid-depth	4	2	1	5	1
	Bottom	4	2	2	5	1
(a)	Surface					1
8:55AM	Mid-depth					2
	Bottom					4
Apr. 26 (a)	Surface	6	5	2	2	2
8:55AM	Mid-depth	6	46	2	3	2
	Bottom	6,300	680	2	8,300	31
(a)	Surface					2
9:40AM	Mid-depth					1
	Bottom					2
Apr. 27 (a)	Surface		6			
9:50AM	Mid-depth		9			
	Bottom		5,300			
(a)	Surface		12			
9:45AM	Mid-depth		22			
	Bottom		9,150			
(a)	Surface		58			
10:00AM	Mid-depth		11			
	Bottom		10,100			
(a)	Surface		36			
10:15AM	Mid-depth		14			
	Bottom		700			
Apr. 28 (a)	Surface		4			
10:15AM	Mid-depth		8			
	Bottom		10,450			
(a)	Surface		3			
10:30AM	Mid-depth		8			
	Bottom		10,550			
Apr. 30 (a)	Surface		25			
11:45AM	Mid-depth		8,300			
	Bottom		12,400			
(a)	Surface		23			
12:00AM	Mid-depth		8,050			
	Bottom		11,450			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Apr. 30 (a) 12:15PM	Surface	270	13		35	
	Mid-depth	9,800	800		1,650	
	Bottom	12,000	11,800		2,100	
May 1 12:30PM	Surface		9			
	Mid-depth		1,950			
	Bottom		12,400			
May 2 (a) 1:15PM	Surface		80			
	Mid-depth		6,350			
	Bottom		12,200			
(a) 1:30PM	Surface		93			
	Mid-depth		5,950			
	Bottom		12,200			
(a) 1:45PM	Surface		59			
	Mid-depth		5,600			
	Bottom		11,750			
(a) 2:00PM	Surface		35			
	Mid-depth		4,150			
	Bottom		11,300			
May 3 (a) 2:15PM	Surface		137			
	Mid-depth		9,500			
	Bottom		12,600			
(a) 2:30PM	Surface		111			
	Mid-depth		11,150			
	Bottom		12,150			
(a) 2:45PM	Surface		62			
	Mid-depth		10,700			
	Bottom		12,650			
(a) 3:00PM	Surface		46			
	Mid-depth		11,950			
	Bottom		12,850			
May 4 (a) 3:19PM	Surface	220	350	600	960	
	Mid-depth	6,700	8,500	4,250	8,550	
	Bottom	12,750	12,950	12,850	9,700	
May 5 (a) 4:15PM	Surface		760			
	Mid-depth		12,850			
	Bottom		13,600			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
May 5 (a) 4:30PM	Surface		350			
	Mid-depth		12,750			
	Bottom		13,800			
May 6 (a) 5:15PM	Surface		2,620			
	Mid-depth		10,900			
	Bottom		11,300			
(a) 5:30PM	Surface		2,600			
	Mid-depth		10,400			
	Bottom		11,100			
May 8 (a) 6:45AM	Surface		4,750			
	Mid-depth		10,200			
	Bottom		13,750			
(a) 7:00AM	Surface		950			
	Mid-depth		10,150			
	Bottom		10,900			
(a) 7:15AM	Surface		8,450			
	Mid-depth		10,000			
	Bottom		10,950			
(a) 7:30AM	Surface		430			
	Mid-depth		11,000			
	Bottom		13,800			
(a) 7:45AM	Surface		440			
	Mid-depth		11,600			
	Bottom		12,200			
May 9 (a) 7:45AM	Surface		3,350			
	Mid-depth		11,400			
	Bottom		13,700			
(a) 8:00AM	Surface		5,050			
	Mid-depth		12,150			
	Bottom		13,950			
(a) 8:15AM	Surface		1,550			
	Mid-depth		9,150			
	Bottom		12,750			
(a) 8:30AM	Surface		1,900			
	Mid-depth		11,450			
	Bottom		11,900			

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 9 (a) 8:45AM.	Surface		2,150			
	Mid-depth		12,300			
	Bottom		14,150			
May 10 (a) 8:51AM	Surface	1,040	1,230	1,630	1,200	
	Mid-depth	12,950	12,250	11,950	12,600	
	Bottom	13,750	13,400	13,450	13,650	
(a) 9:36AM	Surface					910
	Mid-depth					2,450
	Bottom					10,850
May 11 (a) 9:47AM	Surface	1,070				
	Mid-depth	12,500				
	Bottom	14,050				
(a) 10:37AM	Surface			1,320	1,330	1,690
	Mid-depth			12,100	9,850	2,250
	Bottom			12,800	13,950	7,650
May 13 (a) 11:00AM	Surface		1,970			
	Mid-depth		11,900			
	Bottom		13,750			
(a) 11:15AM.	Surface		2,250			
	Mid-depth		10,900			
	Bottom		13,800			
(a) 11:30AM.	Surface		1,950			
	Mid-depth		11,250			
	Bottom		13,750			
(a) 11:45AM	Surface		2,110			
	Mid-depth		6,250			
	Bottom		13,600			
(a) 12:00AM.	Surface		1,460			
	Mid-depth		10,150			
	Bottom		13,550			
May 18 (a) 2:51PM.	Surface	15	9	9	10	
	Mid-depth	3,140	20	10	14	
	Bottom	12,550	11,650	7,150	9,050	
(a) 3:41PM	Surface				9	106
	Mid-depth				18	109
	Bottom				1,700	290

Table 3 (continued) Tide cycle: 1-2 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
July 6 7:06AM (9A)	Surface		1,600			
	Mid-depth		9,900			
	Bottom		13,500			
July 7 8:01AM (9A)	Surface		3,750			
	Mid-depth		12,250			
	Bottom		14,650			
July 9 9:41AM (9A)	Surface		3,250			
	Mid-depth		13,200			
	Bottom		14,250			
Aug. 15 2:35PM	Surface	3,350	9,150		4,900	
	Mid-depth	15,050	14,650		15,300	
	Bottom	15,200	15,100		15,400	
Sept. 6 9:30AM (9A)	Surface		8,150			
	Mid-depth		14,300			
	Bottom		15,650			
Sept.18 6:15AM	Surface	710				
	Mid-depth	13,550				
	Bottom	14,700				
Sept.21 9:20AM (9A)	Surface		7			
	Mid-depth		7			
	Bottom		6			
Sept.22 10:30AM (9A)	Surface		9			
	Mid-depth		9			
	Bottom		8			
Sept.25 12:45PM (9A)	Surface		3			
	Mid-depth					
	Bottom					
Sept.27 2:00PM (9A)	Surface		4			
	Mid-depth					
	Bottom					

Table 4 Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 16 (a) 10:34AM	Surface		7			
	Mid-depth		7			
	Bottom		5			
(a) 10:44AM	Surface		7			
	Mid-depth		7			
	Bottom		7			
Nov. 17 (a) 11:41AM	Surface		155			
	Mid-depth		189			
	Bottom		460			
(a) 11:56AM	Surface		111			
	Mid-depth		121			
	Bottom		125			
(a) 12:11PM	Surface		119			
	Mid-depth		119			
	Bottom		125			
(a) 12:26PM	Surface		101			
	Mid-depth		110			
	Bottom		119			
Nov. 18 (a) 12:15PM	Surface		71			
	Mid-depth		4,800			
	Bottom		5,600			
(a) 12:30PM	Surface		91			
	Mid-depth		81			
	Bottom		80			
(a) 12:45PM	Surface		85			
	Mid-depth		115			
	Bottom		1,740			
(a) 1:00PM	Surface		300			
	Mid-depth		350			
	Bottom		320			
(d) 1:15PM	Surface		280			
	Mid-depth		320			
	Bottom		340			
Nov. 19 (a) 12:30AM	Surface		114			
	Mid-depth		47			
	Bottom		29			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 19 (a) 12:45AM	Surface		45			
	Mid-depth		49			
	Bottom		39			
(a) 1:00AM	Surface		13			
	Mid-depth		39			
	Bottom		19			
(a) 1:00PM	Surface		285			
	Mid-depth		9,600			
	Bottom		8,200			
(a) 1:15PM	Surface		123			
	Mid-depth		320			
	Bottom		560			
(a) 1:30PM	Surface		111			
	Mid-depth		240			
	Bottom		280			
(a) 1:45PM	Surface		165			
	Mid-depth		300			
	Bottom		340			
Nov. 20 (a) 1:45PM	Surface		550			
	Mid-depth		1,100			
	Bottom		10,600			
(a) 2:00PM	Surface		144			
	Mid-depth		301			
	Bottom		5,000			
Nov. 21 (a) 1:45PM	Surface		210			
	Mid-depth		11,500			
	Bottom		13,250			
(a) 2:00PM	Surface		165			
	Mid-depth		7,850			
	Bottom		13,450			
(a) 2:15PM	Surface		127			
	Mid-depth		410			
	Bottom		12,450			
(a) 2:30PM	Surface		186			
	Mid-depth		300			
	Bottom		10,000			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 23 4:30PM	Surface		740			
	Mid-depth		2,900			
	Bottom		10,100			
Nov. 26 (a) 7:45AM	Surface		260			
	Mid-depth		1,400			
	Bottom		1,000			
(a) 8:00AM	Surface		2,200			
	Mid-depth		760			
	Bottom		1,600			
(a) 8:15AM	Surface		780			
	Mid-depth		1,100			
	Bottom		2,200			
(a) 8:30AM	Surface		660			
	Mid-depth		2,600			
	Bottom		1,000			
Nov. 27 (a) 8:30AM	Surface		1,560			
	Mid-depth		11,000			
	Bottom		12,400			
(a) 8:45AM	Surface		10,950			
	Mid-depth		12,200			
	Bottom		12,100			
(a) 9:00AM	Surface		750			
	Mid-depth		6,500			
	Bottom		7,800			
(a) 9:15AM	Surface		300			
	Mid-depth		7,300			
	Bottom		8,200			
(a) 9:30AM	Surface		760			
	Mid-depth		5,900			
	Bottom		6,500			
Nov. 29 (a) 10:15AM	Surface		9			
	Mid-depth		11			
	Bottom		9			
(a) 10:30AM	Surface		9			
	Mid-depth		9			
	Bottom		9			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 29 (a) 10:45AM	Surface		7			
	Mid-depth		9			
	Bottom		9			
(a) 11:00AM	Surface		13			
	Mid-depth		9			
	Bottom		9			
Nov. 30 (a) 11:00AM	Surface		5			
	Mid-depth		3			
	Bottom		5			
(a) 11:15AM	Surface		7			
	Mid-depth		5			
	Bottom		5			
(a) 11:30AM	Surface		9			
	Mid-depth		5			
	Bottom		5			
(a) 11:45AM	Surface		7			
	Mid-depth		7			
	Bottom		13			
Dec. 1 (a) 10:30AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 10:45AM	Surface		7			
	Mid-depth		5			
	Bottom		3			
(a) 11:00AM	Surface		5			
	Mid-depth		3			
	Bottom		7			
(a) 11:15AM	Surface		5			
	Mid-depth		5			
	Bottom		3			
Dec. 3 1:00PM	Surface		9			
	Mid-depth		320			
	Bottom		11,300			
Dec. 5 (a) 2:15PM	Surface		15			
	Mid-depth		132			
	Bottom		6,250			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 5 (a) 2:30PM	Surface		41			
	Mid-depth		280			
	Bottom		420			
(a) 2:45PM	Surface		127			
	Mid-depth		300			
	Bottom		450			
(a) 3:00PM	Surface		88			
	Mid-depth		300			
	Bottom		320			
Dec. 6 (a) 2:30PM	Surface		660			
	Mid-depth		3,800			
	Bottom		13,200			
(a) 2:45PM	Surface		460			
	Mid-depth		1,300			
	Bottom		13,000			
(a) 3:00PM	Surface		240			
	Mid-depth		1,000			
	Bottom		12,200			
Dec. 7 4:00PM	Surface		5			
	Mid-depth		9			
	Bottom		11			
Dec. 13 (a) 8:45AM	Surface		340			
	Mid-depth		6,700			
	Bottom		7,800			
(a) 9:00AM	Surface		340			
	Mid-depth		4,200			
	Bottom		6,500			
(a) 9:15AM	Surface		580			
	Mid-depth		4,100			
	Bottom		6,200			
(a) 9:30AM	Surface		580			
	Mid-depth		1,180			
	Bottom		6,300			
Dec. 14 (a) 9:30AM	Surface		560			
	Mid-depth		8,700			
	Bottom		7,100			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Parts per million

Date	Position	Stations 8	9	10	11	12
1937						
Dec. 14 (a) 9:45AM	Surface		2,700			
	Mid-depth		3,400			
	Bottom		4,800			
(a) 10:00AM	Surface		3,800			
	Mid-depth		3,800			
	Bottom		5,100			
(a) 10:15AM	Surface		2,600			
	Mid-depth		4,600			
	Bottom		3,600			
Dec. 15 (a) 10:30AM	Surface		4,400			
	Mid-depth		4,500			
	Bottom		10,300			
(a) 10:45AM	Surface		2,700			
	Mid-depth		3,000			
	Bottom		5,400			
(a) 11:00AM	Surface		2,700			
	Mid-depth		3,100			
	Bottom		8,100			
Dec. 16 (a) 11:15AM	Surface		4,800			
	Mid-depth		9,500			
	Bottom		8,400			
(a) 11:30AM	Surface		3,500			
	Mid-depth		7,900			
	Bottom		8,500			
(a) 11:45AM	Surface		3,500			
	Mid-depth		7,700			
	Bottom		8,100			
(a) 12:00AM	Surface		6,200			
	Mid-depth		6,200			
	Bottom		7,200			
Dec. 17 (a) 11:45AM	Surface		2,180			
	Mid-depth		11,800			
	Bottom		8,500			
(a) 12:00AM	Surface		2,400			
	Mid-depth		6,300			
	Bottom		10,800			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 17 (a) 12:15PM	Surface		1,900			
	Mid-depth		7,500			
	Bottom		9,500			
(a) 12:30PM	Surface		1,200			
	Mid-depth		3,300			
	Bottom		8,200			
Dec. 18 (a) 12:45PM	Surface		1,050			
	Mid-depth		7,500			
	Bottom		7,600			
(a) 1:00PM	Surface		1,000			
	Mid-depth		3,700			
	Bottom		5,500			
Dec. 20 (a) 2:45PM	Surface		125			
	Mid-depth		171			
	Bottom		186			
(a) 3:00PM	Surface		89			
	Mid-depth		164			
	Bottom		380			
Dec. 21 3:40PM	Surface	240	200		300	
	Mid-depth	200	520		540	
	Bottom	340	2,120		2,100	
Dec. 23 5:25PM	Surface	3	13		320	
	Mid-depth	79	17		280	
	Bottom	340	940		340	
1938						
Jan. 14 (a) 11:00AM	Surface		2,250			
	Mid-depth		10,400			
	Bottom		11,800			
(a) 11:10AM	Surface		1,800			
	Mid-depth		6,400			
	Bottom		10,600			
(a) 11:20AM	Surface		1,500			
	Mid-depth		10,900			
	Bottom		10,900			
(a) 11:30AM	Surface		2,100			
	Mid-depth		4,800			
	Bottom		8,000			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 14 (a) 11:40AM	Surface		2,300			
	Mid-depth		10,200			
	Bottom		9,900			
(a) 11:50AM	Surface		2,200			
	Mid-depth		5,900			
	Bottom		10,000			
(a) 12:00AM	Surface		2,700			
	Mid-depth		9,400			
	Bottom		9,200			
Jan. 15 (a) 11:50AM	Surface		1,650			
	Mid-depth		2,800			
	Bottom		13,900			
(a) 12:00AM	Surface		1,350			
	Mid-depth		3,700			
	Bottom		11,150			
Jan. 16 (a) 12:30PM	Surface		1,350			
	Mid-depth		9,350			
	Bottom		10,850			
(a) 12:40PM	Surface		1,250			
	Mid-depth		8,950			
	Bottom		10,750			
(a) 12:50PM	Surface		1,200			
	Mid-depth		7,050			
	Bottom		10,450			
(a) 1:00PM	Surface		950			
	Mid-depth		4,450			
	Bottom		8,750			
Jan. 17 (a) 1:30PM	Surface		4,400			
	Mid-depth		11,350			
	Bottom		13,200			
(a) 1:40PM	Surface		2,900			
	Mid-depth		12,150			
	Bottom		12,500			
(a) 1:50PM	Surface		4,000			
	Mid-depth		10,100			
	Bottom		12,300			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 17 (a) 2:00PM	Surface		1,750			
	Mid-depth		7,400			
	Bottom		12,000			
Jan. 18 (a) 2:20PM	Surface		2,100			
	Mid-depth		5,300			
	Bottom		11,000			
(a) 2:30PM	Surface		1,500			
	Mid-depth		8,500			
	Bottom		11,100			
(a) 2:40PM	Surface		1,450			
	Mid-depth		5,900			
	Bottom		11,100			
(a) 2:50PM	Surface		1,550			
	Mid-depth		3,900			
	Bottom		9,550			
(a) 3:00PM	Surface		1,600			
	Mid-depth		2,500			
	Bottom		7,950			
Jan. 26 (a) 9:30AM	Surface		7			
	Mid-depth		9			
	Bottom		5			
(a) 9:45AM	Surface		8			
	Mid-depth		6			
	Bottom		7			
(a) 10:00AM	Surface		6			
	Mid-depth		5			
	Bottom		8			
(a) 10:15AM	Surface		9			
	Mid-depth		9			
	Bottom		12			
Jan. 27 10:15AM	Surface		11			
	Mid-depth		5			
	Bottom		3			
(a) 10:30AM	Surface		5			
	Mid-depth		5			
	Bottom		4			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 27 (a) 10:45AM	Surface		5			
	Mid-depth		3			
	Bottom		4			
(a) 11:00AM	Surface		6			
	Mid-depth		5			
	Bottom		5			
(a) 11:15AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
Feb. 2 2:00PM	Surface		17			
	Mid-depth		200			
	Bottom		12,100			
Feb. 3 (a) 2:45PM	Surface		24			
	Mid-depth		1,300			
	Bottom		6,600			
(a) 3:00PM	Surface		75			
	Mid-depth		81			
	Bottom		2,000			
Feb. 4 (a) 3:30PM	Surface		9			
	Mid-depth		145			
	Bottom		11,350			
(a) 3:45PM	Surface		199			
	Mid-depth		200			
	Bottom		350			
(a) 4:00PM	Surface		201			
	Mid-depth		95			
	Bottom		57			
Feb. 11 (a) 9:45AM	Surface	171	29			
	Mid-depth	560	370			
	Bottom	6,250	8,700			
(a) 10:45AM	Surface		101		35	
	Mid-depth		123		39	
	Bottom		132		7,600	
Feb. 13 (a) 11:30AM	Surface	410	11			
	Mid-depth	510	3,900			
	Bottom	5,750	6,500			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 13 (a)	Surface	600	460		280	
12:30AM	Mid-depth	860	900		2,400	
	Bottom	1,050	630		590	
Feb. 14	Surface	260	37			
12:20PM	Mid-depth	1,000	220			
	Bottom	12,500	12,900			
Feb. 15	Surface	158	52		280	
1:20PM	Mid-depth	3,400	2,400		4,000	
	Bottom	6,750	12,950		13,800	
Feb. 20 (a)	Surface		220			
5:15PM	Mid-depth		7,350			
	Bottom		14,400			
(a)	Surface		260			
5:30PM	Mid-depth		7,800			
	Bottom		14,200			
(a)	Surface		360			
5:45PM	Mid-depth		7,900			
	Bottom		13,800			
(a)	Surface		330			
6:00PM	Mid-depth		440			
	Bottom		13,600			
Feb. 25 (a)	Surface		1,280			
9:45AM	Mid-depth		1,400			
	Bottom		13,400			
(a)	Surface		1,140			
10:00AM	Mid-depth		1,250			
	Bottom		13,400			
Feb. 28	Surface	500	420		400	
11:45AM	Mid-depth	690	540		1,750	
	Bottom	12,400	7,800		11,950	
Mar. 27 (a)	Surface		2			
9:45AM	Mid-depth		1			
	Bottom		1			
(a)	Surface		3			
10:00AM	Mid-depth		1			
	Bottom		2			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
Mar. 27 (a)	Surface		2			
10:15AM	Mid-depth		4			
	Bottom		2			
(a)	Surface		2			
10:30AM	Mid-depth		3			
	Bottom		2			
(a)	Surface		1			
10:45AM	Mid-depth		2			
	Bottom		2			
Mar. 28	Surface	3	2	1	2	2
10:40AM	Mid-depth					5
	Bottom	2	2	1	3	1
Mar. 29 (a)	Surface		2			
11:15AM	Mid-depth		3			
	Bottom		3			
(a)	Surface		1			
11:30AM	Mid-depth		2			
	Bottom		2			
Apr. 1 (a)	Surface	12	11	5	9	5
1:15PM	Mid-depth	27	21	2	17	3
	Bottom	1,350	17	3	10,750	390
Apr. 3	Surface	5	5	2	12	207
2:45PM	Mid-depth	5	23	4	28	250
	Bottom	5,050	27	5	4,400	320
Apr. 4	Surface	3	3	3	7	133
3:35PM	Mid-depth	7	11	3	15	137
	Bottom	2,850	17	5	340	139
Apr. 11	Surface	47	10	10	15	
10:15AM	Mid-depth	208	94	19	25	
	Bottom	12,450	12,250	6,250	12,450	
Apr. 12	Surface	170	12	4	12	330
11:15AM	Mid-depth	180	15	8	40	390
	Bottom	11,300	7,600	8,000	11,400	560
Apr. 13	Surface	12	9	4	11	300
11:55AM	Mid-depth	270	235	9	161	470
	Bottom	2,500	1,500	6,250	3,850	960

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
Apr, 17	Surface	3	3	2	3	63
3:25PM	Mid-depth	3	3	3	11	63
	Bottom	1,070	7	3	43	63
Apr. 18	Surface	3	3	3	2	3
3:35PM	Mid-depth	5	3	3	3	12
	Bottom	4	4	4	4	8
Apr. 20	Surface	5	1	3	2	2
5:20PM	Mid-depth	2	4	4	3	2
	Bottom	3	3	2	4	5
Apr. 23 (a)	Surface		1			
7:15AM	Mid-depth		2			
	Bottom		3			
(a)	Surface		3			
7:30AM	Mid-depth		1			
	Bottom		3			
(a)	Surface		3			
7:45AM	Mid-depth		2			
	Bottom		3			
(a)	Surface		1			
8:00AM	Mid-depth		2			
	Bottom		3			
(a)	Surface	2	2			
8:15AM	Mid-depth	2	6			
	Bottom	3	2			
Apr. 24	Surface		2			
8:15AM	Mid-depth		1			
	Bottom		2			
Apr. 25	Surface	2	2	2	2	
9:10AM	Mid-depth	2	2	2	1	
	Bottom	3	2	2	4	
Apr. 26	Surface	2	4	2	2	
9:55AM	Mid-depth	3	4	1	6	
	Bottom	9	41	27	6,900	
Apr. 27	Surface		3			
10:30AM	Mid-depth		58			
	Bottom		4,150			

Table 4 (continued) Tide cycle: 2-3 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 8 (a) 8:00AM	Surface		240			
	Mid-depth		5,950			
	Bottom		8,900			
(a) 8:15AM	Surface		280			
	Mid-depth		320			
	Bottom		13,050			
(a) 8:30AM	Surface		450			
	Mid-depth		1,340			
	Bottom		12,150			
(a) 8:45AM	Surface		95			
	Mid-depth		910			
	Bottom		1,740			
May 9 (a) 9:00AM	Surface		1,450			
	Mid-depth		11,100			
	Bottom		13,850			
(a) 9:15AM	Surface		1,100			
	Mid-depth		8,950			
	Bottom		13,700			
(a) 9:30AM	Surface		700			
	Mid-depth		4,050			
	Bottom		11,100			
May 10 9:51AM	Surface	690	710	720	980	
	Mid-depth	12,000	13,350	12,300	12,200	
	Bottom	13,400	13,700	13,250	13,800	
May 11 10:42AM	Surface	960	1,000			
	Mid-depth	12,600	12,600			
	Bottom	13,750	13,750			
May 18 3:51PM	Surface	20	81	9		
	Mid-depth	107	108	17		
	Bottom	9,600	9,750	9,050		
Sept.23 12:00AM (9A)	Surface		10			
	Mid-depth		20			
	Bottom		9			
Sept.24 1:01PM (9A)	Surface		4			
	Mid-depth					
	Bottom					

Table 5 Tide cycle: 3-4 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 15 (a) 11:00AM	Surface		11			
	Mid-depth		11			
	Bottom		13			
(a) 11:10AM	Surface		11			
	Mid-depth		11			
	Bottom		13			
(a) 11:20AM	Surface		13			
	Mid-depth		13			
	Bottom		13			
(a) 11:30AM	Surface		13			
	Mid-depth		13			
	Bottom		13			
Nov. 17 (a) 12:41PM	Surface		11			
	Mid-depth		8			
	Bottom		9			
(a) 12:56PM	Surface		9			
	Mid-depth		11			
	Bottom		9			
(a) 1:11PM	Surface		9			
	Mid-depth		9			
	Bottom		17			
Nov. 18 (a) 1:30PM	Surface		260			
	Mid-depth		310			
	Bottom		360			
(a) 1:45PM	Surface		235			
	Mid-depth		250			
	Bottom		260			
(a) 2:00PM	Surface		165			
	Mid-depth		165			
	Bottom		159			
(a) 2:15PM	Surface		11			
	Mid-depth		9			
	Bottom		9			
Nov. 19 (a) 1:15AM	Surface		33			
	Mid-depth		27			
	Bottom		37			

Table 5 (continued) Tide cycle: 3-4 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 19 (a) 2:00PM	Surface		127			
	Mid-depth		320			
	Bottom		320			
Nov. 21 (a) 2:45PM	Surface		220			
	Mid-depth		200			
	bottom		480			
(a) 3:00PM	Surface		240			
	Mid-depth		260			
	Bottom		340			
Nov. 26 (a) 8:45AM	Surface		1,710			
	Mid-depth		1,100			
	Bottom		2,400			
(a) 9:00AM	Surface		330			
	Mid-depth		420			
	Bottom		1,050			
(a) 9:15AM	Surface		900			
	Mid-depth		1,200			
	Bottom		104			
(a) 9:30AM	Surface		1,190			
	Mid-depth		1,200			
	Bottom		400			
Nov. 27 (a) 9:45AM	Surface		340			
	Mid-depth		1,100			
	Bottom		1,300			
(a) 10:00AM	Surface		910			
	Mid-depth		1,100			
	Bottom		1,300			
Nov. 29 (a) 11:15AM	Surface		11			
	Mid-depth		9			
	Bottom		13			
(a) 11:30AM	Surface		9			
	Mid-depth		9			
	Bottom		9			
(a) 11:45AM	Surface		11			
	Mid-depth		9			
	Bottom		9			

Table 5 (continued) Tide cycle: 3-4 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 29 (a) 12:00AM	Surface		11			
	Mid-depth		11			
	Bottom		9			
Nov. 30 12:00AM	Surface		7			
	Mid-depth		5			
	Bottom		5			
Dec. 1 (a) 11:30AM	Surface		5			
	Mid-depth		7			
	Bottom		5			
(a) 11:45AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 12:00AM	Surface		3			
	Mid-depth		3			
	Bottom		3			
Dec. 11 (a) 9:00AM	Surface		6			
	Mid-depth		4			
	Bottom		6			
Dec. 13 (a) 9:45AM	Surface		-			
	Mid-depth		1,120			
	Bottom		6,400			
(a) 10:00AM	Surface		980			
	Mid-depth		1,080			
	Bottom		1,080			
Dec. 14 (a) 10:30AM	Surface		2,200			
	Mid-depth		3,000			
	Bottom		2,100			
(a) 10:45AM	Surface		1,500			
	Mid-depth		1,700			
	Bottom		3,200			
(a) 11:00AM	Surface		1,700			
	Mid-depth		2,100			
	Bottom		2,000			
Dec. 17 (a) 12:45PM	Surface		1,500			
	Mid-depth		2,400			
	Bottom		7,800			

Table 5 (continued) Tide cycle: 3-4 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 17 (a) 1:00PM	Surface		4,400			
	Mid-depth		1,700			
	Bottom		7,800			
1938						
Jan. 26 (a) 10:30AM	Surface		9			
	Mid-depth		11			
	Bottom		10			
(a) 10:45AM	Surface		7			
	Mid-depth		10			
	Bottom		10			
(a) 11:00AM	Surface		7			
	Mid-depth		12			
	Bottom		12			
(a) 11:15AM	Surface		30			
	Mid-depth		28			
	Bottom		29			
Jan. 27 (a) 11:30AM	Surface		8			
	Mid-depth		7			
	Bottom		7			
(a) 11:45AM	Surface		6			
	Mid-depth		7			
	Bottom		7			
(a) 12:00AM	Surface		6			
	Mid-depth		7			
	Bottom		6			
Feb. 11 10:50AM	Surface	78				
	Mid-depth	280				
	Bottom	1,720				
Feb. 13 1:30PM	Surface	340	720		720	
	Mid-depth	700	720		800	
	Bottom	1,300	760		1,150	
Mar. 27 11:00AM	Surface		2			
	Mid-depth		3			
	Bottom		3			

Table 5 (continued Tide cycle: 3-4 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Apr. 18 (a) 4:35PM	Surface	4	3	9	3	1
	Mid-depth	2	3	3	3	5
	Bottom	5	2	5	4	2
(a) 5:20PM	Surface					3
	Mid-depth					8
	Bottom					3
May 8 (a) 9:00AM	Surface		260			
	Mid-depth		680			
	Bottom		690			
(a) 9:15AM	Surface		420			
	Mid-depth		1,360			
			760			

Table 6 Tide cycle: 4-5 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 18 (a) 2:30PM	Surface		11			
	Mid-depth		9			
	Bottom		10			
(a) 2:45PM	Surface		17			
	Mid-depth		11			
	Bottom		9			
(a) 3:00PM	Surface		11			
	Mid-depth		11			
	Bottom		5			
(a) 3:15PM	Surface		9			
	Mid-depth		9			
	Bottom		9			
(a) 3:30PM	Surface		9			
	Mid-depth		9			
	Bottom		9			
Nov. 25 (a) 9:00AM	Surface		420			
	Mid-depth		440			
	Bottom		420			
(a) 9:15AM	Surface		420			
	Mid-depth		420			
	Bottom		440			
(a) 9:30AM	Surface		360			
	Mid-depth		360			
	Bottom		360			
(a) 9:45AM	Surface		360			
	Mid-depth		380			
	Bottom		360			
Dec. 11 (a) 9:15AM	Surface		6			
	Mid-depth		5			
	Bottom		8			
(a) 9:30AM	Surface		7			
	Mid-depth		5			
	Bottom		8			
(a) 9:45AM	Surface		6			
	Mid-depth		5			
	Bottom		5			

Table 6 (continued) Tide cycle: 4-5 hours after high tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 11 (a) 10:00AM	Surface		4			
	Mid-depth		4			
	Bottom		5			
Dec. 12 (a) 10:00AM	Surface		620			
	Mid-depth		680			
	Bottom		680			
(a) 10:15AM	Surface		640			
	Mid-depth		620			
	Bottom		660			
(a) 10:30AM	Surface		500			
	Mid-depth		500			
	Bottom		520			
(a) 10:45AM	Surface		500			
	Mid-depth		480			
	Bottom		480			
(a) 11:00AM	Surface		480			
	Mid-depth		460			
	Bottom		440			
1938						
Jan. 26 11:30AM	Surface		30			
	Mid-depth		30			
	Bottom		28			
Apr. 18 5:35PM	Surface	3	2	2	3	
	Mid-depth	2	2	3	3	
	Bottom	3	2	3	3	

Table 7 Tide cycle: One hour before to low tide

Parts per million

Date	Position	Station 8	9	10	11	12
1937						
Nov. 18 (a) 3:45PM	Surface		7			
	Mid-depth		8			
	Bottom		9			
(a) 4:00PM	Surface		7			
	Mid-depth		6			
	Bottom		7			
(a) 4:15PM	Surface		7			
	Mid-depth		6			
	Bottom		7			
(a) 4:30PM	Surface					
	Mid-depth		8			
	Bottom		7			
(a) 4:45PM	Surface					
	Mid-depth		5			
	Bottom		7			
Nov. 25 (a) 10:00AM	Surface		360			
	Mid-depth		360			
	Bottom		360			
(a) 10:15AM	Surface		300			
	Mid-depth		300			
	Bottom		300			
(a) 10:30AM	Surface		260			
	Mid-depth		260			
	Bottom		280			
(a) 10:45AM	Surface		300			
	Mid-depth		280			
	Bottom		280			
Dec. 11 (a) 10:15AM	Surface		6			
	Mid-depth		4			
	Bottom		6			
(a) 10:30AM	Surface					
	Mid-depth		5			
	Bottom		6			
(a) 10:45AM	Surface		5			
	Mid-depth		5			
	Bottom		6			

Table 7 (continued) Tide cycle: One hour before to low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 11 (a) 11:00AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 11:15AM	Surface		6			
	Mid-depth		5			
	Bottom		7			
Dec. 12 (a) 11:15AM	Surface		420			
	Mid-depth		480			
	Bottom		460			
(a) 11:30AM	Surface		420			
	Mid-depth		420			
	Bottom		420			
(a) 11:45AM	Surface		420			
	Mid-depth		400			
	Bottom		440			
(a) 12:00AM	Surface		260			
	Mid-depth		300			
	Bottom		340			
(a) 12:15PM	Surface		280			
	Mid-depth		300			
	Bottom		300			
Dec. 27 1:21PM (12A)	Surface					23
	Mid-depth					25
	Bottom					27

Table 8 Tide cycle: low tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Nov. 18 (a) 5:00PM	Surface		7			
	Mid-depth		6			
	Bottom		7			
(a) 5:15PM	Surface		11			
	Mid-depth		7			
	Bottom		5			
(a) 5:30PM	Surface		7			
	Mid-depth		5			
	Bottom		7			
(a) 5:45PM	Surface		7			
	Mid-depth		7			
	Bottom		7			
Nov. 25 (a) 11:00AM	Surface		109			
	Mid-depth		200			
	Bottom		113			
(a) 11:15AM	Surface		109			
	Mid-depth		109			
	Bottom		109			
(a) 11:30AM	Surface		13			
	Mid-depth		13			
	Bottom		13			
(a) 11:45AM	Surface		11			
	Mid-depth		13			
	Bottom		11			
Dec. 11 (a) 11:30AM	Surface		4			
	Mid-depth		4			
	Bottom		7			
(a) 11:45AM	Surface		5			
	Mid-depth		4			
	Bottom		6			
(a) 12:00AM	Surface		6			
	Mid-depth		8			
	Bottom		6			
Dec. 12 (a) 12:30PM	Surface		123			
	Mid-depth		143			
	Bottom		149			

Table 8 (continued) Tide cycle: low tide to one hour after

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1937						
Dec. 12 (a)	Surface		137			
12:45PM	Mid-depth		137			
	Bottom		137			
(a)	Surface		169			
1:00PM	Mid-depth		43			
	Bottom		59			
(a)	Surface		41			
1:15PM	Mid-depth		55			
	Bottom		63			
(a)	Surface		43			
1:30PM	Mid-depth		43			
	Bottom		63			
Dec. 25 (a)	Surface	500	620		520	
11:45AM	Mid-depth	540	620		700	
	Bottom	600	620		1,080	
(e)	Surface					820
11:34AM (12A)	Mid-depth					1,020
	Bottom					1,040
Dec. 26 (f)	Surface					780
12:47PM (12A)	Mid-depth					820
	Bottom					820
(f)	Surface					760
1:02PM (12A)	Mid-depth					760
	Bottom					820
(f)	Surface					600
1:17PM (12A)	Mid-depth					640
	Bottom					660
(e)	Surface					820
12:32PM (12A)	Mid-depth					1,700
	Bottom					3,100
Dec. 27	Surface	35	15		15	
1:35PM	Mid-depth	119	9		167	
	Bottom	103	9		179	

Table 8 (continued) Tide cycle: low tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 8 (e)	Surface					19
9:38AM (12A)	Mid-depth					21
	Bottom					15
	Surface	9	9		8	
9:50AM	Mid-depth	12	7		8	
	Bottom	12	7		19	
Jan. 9 (e)	Surface					25
10:38AM (12A)	Mid-depth					13
	Bottom					27
	Surface	6	7		5	
10:50AM	Mid-depth	11	8		9	
	Bottom	6	8		7	
Jan. 10 (e)	Surface					13
11:40AM (12A)	Mid-depth					21
	Bottom					13
(a)	Surface				11	
11:55AM	Mid-depth				11	
	Bottom				11	
(a)	Surface	43	7		5	
12:00AM	Mid-depth	25	7		7	
	Bottom	23	11		10	
Jan. 11 (e)	Surface					520
12:38PM (12A)	Mid-depth					540
	Bottom					580
(a)	Surface	400	260		440	
12:50PM	Mid-depth	320	340		460	
	Bottom	420	420		480	
Jan. 24 (e)	Surface					1,850
11:55AM (12A)	Mid-depth					2,100
	Bottom					2,100
(a)	Surface	1,380	960		1,800	
12:10PM	Mid-depth	8,850	3,150		1,900	
	Bottom	3,100	12,100		12,100	

Table 8 (continued) Tide cycle: low tide to one hour after

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 25 (c) 12:54PM (12A)	Surface					1,500
	Mid-depth					1,600
	Bottom					1,700
(a) 1:05PM	Surface		1,050			
	Mid-depth		1,050			
	Bottom		1,200			
(a) 1:20PM	Surface		1,000			
	Mid-depth		1,030			
	Bottom		1,060			
(a) 1:35PM	Surface		880			
	Mid-depth		900			
	Bottom		940			
(a) 1:50PM	Surface		780			
	Mid-depth		900			
	Bottom		920			

Table 9 Tide cycle: 1-2 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 18 (a) 6:00PM	Surface		13			
	Mid-depth		7			
	Bottom		5			
(a) 6:15PM	Surface		6			
	Mid-depth		5			
	Bottom		11			
(a) 6:30PM	Surface		8			
	Mid-depth		9			
	Bottom		7			
Nov. 25 (a) 12:00AM	Surface		11			
	Mid-depth		9			
	Bottom		23			
(a) 12:15PM	Surface		13			
	Mid-depth		11			
	Bottom		11			
(a) 12:30PM	Surface		11			
	Mid-depth		11			
	Bottom		17			
(a) 12:45PM	Surface		11			
	Mid-depth		15			
	Bottom		11			
Dec. 9 11:00AM	Surface		7			
	Mid-depth		7			
	Bottom		13			
Dec. 10 12:00AM	Surface		5			
	Mid-depth		5			
	Bottom		13			
Dec. 11 (a) 12:15PM	Surface		5			
	Mid-depth		5			
	Bottom		7			
(a) 12:30PM	Surface		5			
	Mid-depth		6			
	Bottom		6			
(a) 12:45PM	Surface		5			
	Mid-depth		5			
	Bottom		6			

Table 9 (continued) Tide cycle: 1-2 hours after low tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1937						
Dec. 11 (a)	Surface		4			
1:00PM	Mid-depth		4			
	Bottom		5			
Dec. 12 (a)	Surface		23			
1:45PM	Mid-depth		43			
	Bottom		59			
(a)	Surface		23			
2:00PM	Mid-depth		43			
	Bottom		49			
(a)	Surface		23			
2:15PM	Mid-depth		43			
	Bottom		65			
(a)	Surface		11			
2:30PM	Mid-depth		135			
	Bottom		580			
Dec. 24 (a)	Surface		260			
12:00AM	Mid-depth		3,000			
	Bottom		3,700			
(a)	Surface		220			
12:15PM	Mid-depth		1,000			
	Bottom		3,000			
Dec. 25	Surface	300	380		300	
12:45PM	Mid-depth	360	380		380	
	Bottom	480	380		520	
Dec. 26 (f)	Surface					620
1:32PM (12A)	Mid-depth					640
	Bottom					680
(f)	Surface					460
1:47PM (12A)	Mid-depth					460
	Bottom					500
(f)	Surface					400
2:02PM (12A)	Mid-depth					500
	Bottom					500
(f)	Surface					360
2:17PM (12A)	Mid-depth					380
	Bottom					440

Table 9 (continued) Tide cycle: 1-2 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 27 2:35PM	Surface	21	7		11	
	Mid-depth	27	7		11	
	Bottom	121	9		155	
1938						
Jan. 8 10:50AM	Surface	8	7		8	
	Mid-depth	8	8		9	
	Bottom	6	8		10	
Jan. 9 11:50AM	Surface	7	7		7	
	Mid-depth	7	6		6	
	Bottom	8	8		7	
Jan. 10 1:00PM	Surface	16	7		7	
	Mid-depth	18	8		7	
	Bottom	21	7		7	
Jan. 11 1:50PM	Surface	340	280		450	
	Mid-depth	370	460		460	
	Bottom	420	1,700		480	
Jan. 24 1:10PM	Surface	1,330	1,050		1,250	
	Mid-depth	3,400	13,100		6,200	
	Bottom	1,500	13,800		14,750	
Jan. 25 (a) 2:05PM	Surface		570			
	Mid-depth		790			
	Bottom		750			
(a) 2:20PM	Surface		460			
	Mid-depth		660			
	Bottom		600			
(a) 2:35PM	Surface		440			
	Mid-depth		490			
	Bottom		520			
(a) 2:50PM	Surface		390			
	Mid-depth		400			
	Bottom		420			
Feb. 22 (a) 12:55PM	Surface	45	57		15	
	Mid-depth	144	56		35	
	Bottom	1,300	59		53	

Table 9 (continued) Tide cycle: 1-2 hours after low tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Feb. 22 (e) 12:40PM (12A)	Surface					34
	Mid-depth					47
	Bottom					50
Mar. 8 (e) 11:09AM (12A)	Surface					13
	Mid-depth					17
	Bottom					13
(a) 11:20AM	Surface	9	7		8	
	Mid-depth	7	9		21	
	Bottom	8	11		11	
Mar. 9 (e) 12:13PM (12A)	Surface					85
	Mid-depth					99
	Bottom					121
(a) 12:25PM	Surface	86	46		95	
	Mid-depth	122	75		145	
	Bottom	260	85		201	
Mar. 10 (e) 1:20PM (12A)	Surface					240
	Mid-depth					310
	Bottom					320
1:35PM	Surface	270	210		200	
	Mid-depth	2,100	950		420	
	Bottom	8,600	3,900		4,900	
Mar. 23 (e) 12:00AM (12A)	Surface					5
	Mid-depth					11
	Bottom					9
(a) 12:25PM	Surface	5	4	5	5	5
	Mid-depth	5	5	4	6	5
	Bottom	5	5	11	11	5
Mar. 24 (e) 12:55PM (12A)	Surface					5
	Mid-depth					5
	Bottom					5
(a) 1:15PM	Surface	3	5	2	4	4
	Mid-depth	5	3	3	5	6
	Bottom	3	7	4	6	5
Mar. 25 (e) 1:48PM (12A)	Surface					6
	Mid-depth					3
	Bottom					9

Table 9 (continued) Tide cycle: 1-2 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Mar. 25 (a)	Surface	3	2	3	8	3
2:15PM	Mid-depth	3	3	7	5	3
	Bottom	3	2	2	8	5
Apr. 8 (e)	Surface					3
1:06PM (12A)	Mid-depth					4
	Bottom					7
Apr. 9 (a)	Surface				6	7
2:25PM	Mid-depth				7	10
	Bottom				13	9
(e)	Surface					10
2:10PM (12A)	Mid-depth					10
	Bottom					16
Apr. 10 (e)	Surface					7
3:10PM (12A)	Mid-depth					10
	Bottom					10
(a)	Surface					5
3:20PM	Mid-depth					6
	Bottom					5
Apr. 21 (e)	Surface					2
11:46AM (12A)	Mid-depth					3
	Bottom					4
(a)	Surface				1	4
11:55AM	Mid-depth				3	4
	Bottom				3	2
Apr. 22 (a)	Surface	5	3	17	7	3
12:30PM	Mid-depth	3	5	19	15	13
	Bottom	3	4	5	12	8
(e)	Surface					7
12:09PM (12A)	Mid-depth					3
	Bottom					3
May 7	Surface				22	
1:05PM	Mid-depth				16	
	Bottom				20	

Table 10 . . Tide cycle: 2-3 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 18 (a) 6:45PM	Surface		6			
	Mid-depth		5			
	Bottom		7			
(a) 7:00PM	Surface		6			
	Mid-depth		7			
	Bottom		7			
(a) 7:15PM	Surface		7			
	Mid-depth		21			
	Bottom		7			
(a) 7:30PM	Surface		7			
	Mid-depth		9			
	Bottom		5			
Nov. 22 (a) 10:00AM	Surface		9			
	Mid-depth		9			
	Bottom		8			
(a) 10:15AM	Surface		7			
	Mid-depth		5			
	Bottom		9			
(a) 10:30AM	Surface		11			
	Mid-depth		11			
	Bottom		9			
Nov. 23 11:30AM	Surface		19			
	Mid-depth		275			
	Bottom		220			
Nov. 25 (a) 1:00PM	Surface		15			
	Mid-depth		15			
	Bottom		15			
(a) 1:15PM	Surface		29			
	Mid-depth		11			
	Bottom		11			
(a) 1:30PM	Surface		11			
	Mid-depth		13			
	Bottom		11			
(a) 1:45PM	Surface		15			
	Mid-depth		13			
	Bottom		149			

Table 10 (continued) Tide cycle: 2-3 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 25 (a) 2:00PM	Surface		13			
	Mid-depth		17			
	Bottom		137			
Dec. 8 11:00AM	Surface		13			
	Mid-depth		12			
	Bottom		65			
Dec. 9 (a) 11:15AM	Surface		5			
	Mid-depth		7			
	Bottom		5			
(a) 11:30AM	Surface		9			
	Mid-depth		3			
	Bottom		7			
(a) 11:45AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
Dec. 10 (a) 12:00AM	Surface		7			
	Mid-depth		5			
	Bottom		5			
(a) 12:15PM	Surface		5			
	Mid-depth		5			
	Bottom		7			
(a) 12:30PM	Surface		15			
	Mid-depth		5			
	Bottom		4			
(a) 12:45PM	Surface		7			
	Mid-depth		7			
	Bottom		7			
(a) 1:00PM	Surface		9			
	Mid-depth		15			
	Bottom		960			
Dec. 11 (a) 1:15PM	Surface		5			
	Mid-depth		5			
	Bottom		6			
(a) 1:30PM	Surface					
	Mid-depth					
	Bottom		13			

Table 10 (continued) Tide cycle: 2-3 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 11 (a) 1:45PM	Surface		9			
	Mid-depth		9			
	Bottom		8			
(a) 2:00PM	Surface		8			
	Mid-depth		9			
	Bottom		9			
Dec. 12 (a) 2:45PM	Surface		11			
	Mid-depth		213			
	Bottom		540			
(a) 3:00PM	Surface		11			
	Mid-depth		89			
	Bottom		240			
Dec. 24 (a) 12:30PM	Surface		220			
	Mid-depth		600			
	Bottom		3,600			
(a) 12:45PM	Surface		200			
	Mid-depth		1,500			
	Bottom		4,200			
(a) 1:00PM	Surface		220			
	Mid-depth		4,200			
	Bottom		5,200			
(a) 1:15PM	Surface		200			
	Mid-depth		320			
	Bottom		2,400			
Dec. 25 1:45PM	Surface	300	380		280	
	Mid-depth	580	360		360	
	Bottom	460	380		560	
Dec. 26 (f) 2:32PM (12A)	Surface					320
	Mid-depth					380
	Bottom					400
(f) 2:47PM (12A)	Surface					220
	Mid-depth					260
	Bottom					360
(f) 3:02PM (12A)	Surface					260
	Mid-depth					300
	Bottom					380

Table 10 (continued) Tide cycle: 2-3 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 27	Surface	15	9		11	
3:35PM	Mid-depth	81	79		117	
	Bottom	1,380	200		171	
1938						
Jan. 7	Surface	117	113		211	
10:50AM	Mid-depth	540	500		440	
	Bottom	3,770	4,350		4,850	
Jan. 8	Surface	7	8		11	
11:50AM	Mid-depth	7	8		8	
	Bottom	8	7		10	
Jan. 9	Surface	11	7		7	
12:50PM	Mid-depth	8	7		7	
	Bottom	6	7		7	
Jan. 10	Surface	5	6			
2:00PM	Mid-depth	6	7			
	Bottom	11	7			
Jan. 11	Surface	300	260		260	
2:50PM	Mid-depth	240	560		320	
	Bottom	380	460		1,880	
Jan. 20 (a)	Surface		390			
10:00AM	Mid-depth		2,150			
	Bottom		6,150			
(a)	Surface		390			
10:15AM	Mid-depth		760			
	Bottom		4,500			
(a)	Surface		420			
10:30AM	Mid-depth		2,200			
	Bottom		3,750			
(a)	Surface		470			
10:45AM	Mid-depth		1,850			
	Bottom		4,400			
Jan. 21 (f)	Surface					540
11:42AM (12A)	Mid-depth					1,400
	Bottom					3,100

Table 10 (continued) Tide cycle: 2-3 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 22 (f)	Surface					760
12:39PM (12A)	Mid-depth					4,000
	Bottom					7,000
Jan. 24	Surface	1,470	1,400		1,020	
2:10PM	Mid-depth	7,200	7,400		6,700	
	Bottom	8,250	13,800		14,200	
Jan. 25 (a)	Surface		360			
3:05PM	Mid-depth		360			
	Bottom		380			
(a)	Surface		330			
3:20PM	Mid-depth		350			
	Bottom		350			
(a)	Surface		280			
3:35PM	Mid-depth		310			
	Bottom		310			
(a)	Surface		280			
3:50PM	Mid-depth		290			
	Bottom		300			
Feb. 7 (a)	Surface	9	5		7	
12:05PM	Mid-depth	7	7		11	
	Bottom	7	3		17	
(a)	Surface	11	5		5	
12:35PM	Mid-depth	11	5		5	
	Bottom	5	5		3	
Feb. 10 (e)	Surface					7
4:07PM (12A)	Mid-depth					9
	Bottom					7
Feb. 21	Surface	156	186		145	
1:05PM	Mid-depth	1,360	1,520		330	
	Bottom	9,100	1,880		450	
Feb. 22	Surface	35	9		11	
1:55PM	Mid-depth	207	129		30	
	Bottom	8,800	580		47	
Feb. 23 (e)	Surface					17
2:38PM (12A)	Mid-depth					19
	Bottom					27

Table 10 (continued) Tide cycle: 2-3 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 23 (a)	Surface	37	9		7	
2:50PM	Mid-depth	83	139		37	
	Bottom	2,750	310		3,500	
Feb. 24 (e)	Surface					630
3:31PM (12A)	Mid-depth					700
	Bottom					2,900
(a)	Surface	350	290		540	
3:45PM	Mid-depth	4,450	1,020		1,340	
	Bottom	13,200	9,600		10,300	
Mar. 8	Surface	8	9		12	
12:20PM	Mid-depth	8	7		11	
	Bottom	7	10		10	
Mar. 9	Surface	80	99		119	
1:25PM	Mid-depth	227	99		215	
	Bottom	1,040	206		310	
Mar. 10	Surface	220	220		290	
2:35PM	Mid-depth	3,250	4,550		1,300	
	Bottom	10,300	3,200		5,600	
Mar. 23	Surface	8	4	5	5	4
1:25PM	Mid-depth	7	6	5	5	5
	Bottom	5	5	9	14	4
Mar. 24	Surface	3	3	4	7	3
2:15PM	Mid-depth	3	3	3	5	3
	Bottom	6	5	4	7	3
Mar. 25	Surface	5	2	5	3	3
3:15PM	Mid-depth	3	2	4	5	9
	Bottom	2	3	2	7	2
Apr. 8	Surface		3	5	3	4
2:30PM	Mid-depth		4	5	4	3
	Bottom		6	7	11	11
Apr. 9 (a)	Surface	12	10	6		
2:35PM	Mid-depth	21	5	6		
	Bottom	1,220	6	10		
(a)	Surface			7	8	9
3:30PM	Mid-depth			6	11	12
	Bottom			11	8	29

Table 10 (continued) Tide cycle: 2-3 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Apr. 10 (a) 3:35PM	Surface	5	5	4	6	
	Mid-depth	8	5	4	8	
	Bottom	3	7	7	10	
(a) 4:25PM	Surface				6	5
	Mid-depth				7	6
	Bottom				7	5
Apr. 21 12:05PM	Surface	2	3	9	1	5
	Mid-depth	2	2	3	3	3
	Bottom	3	2	2	7	5
Apr. 22 1:30PM	Surface	3	3	3	3	3
	Mid-depth	3	2	6	7	5
	Bottom	3	2	4	3	5
May 2 9:15AM	Surface		6		9	
	Mid-depth		9		9	
	Bottom		16		10	
May 4 11:04AM	Surface					47
	Mid-depth					30
	Bottom					30
May 5 (a) 11:45AM	Surface	10	9		10	
	Mid-depth	13	9		11	
	Bottom	13	26		13	
(a) 12:00AM	Surface		10			
	Mid-depth		10			
	Bottom		24			
May 6 (a) 12:40PM	Surface	15	20		28	
	Mid-depth	137	109		34	
	Bottom	430	145		161	
(a) 1:00PM	Surface		48			
	Mid-depth		106			
	Bottom		119			
May 7 (a) 1:10PM	Surface	21	20			
	Mid-depth	54	12			
	Bottom	58	13			
(a) 1:30PM	Surface		9			
	Mid-depth		13			
	Bottom		20			

Table 10 (continued) Tide cycle: 2-3 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 7 (a) 1:45PM	Surface		10			
	Mid-depth		13			
	Bottom		15			
(a) 2:00PM	Surface		11			
	Mid-depth		11			
	Bottom		16			

Table 11 Tide cycle: 3-4 hours after low tide

Parts per million

Date	Position	Stations 8	9	10	11	12
1937						
Nov. 18 (a) 7:45PM	Surface		7			
	Mid-depth		9			
	Bottom		7			
(a) 8:00PM	Surface		7			
	Mid-depth		11			
	Bottom		7			
(a) 8:15PM	Surface		7			
	Mid-depth		5			
	Bottom		5			
(a) 8:30PM	Surface		9			
	Mid-depth		7			
	Bottom		7			
Nov. 20 (a) 9:00AM	Surface		11			
	Mid-depth		15			
	Bottom		12			
(a) 9:15AM	Surface		13			
	Mid-depth		12			
	Bottom		12			
(a) 9:30AM	Surface		19			
	Mid-depth		19			
	Bottom		17			
Nov. 21 (a) 10:00AM	Surface		11			
	Mid-depth		17			
	Bottom		16			
(a) 10:15AM	Surface		15			
	Mid-depth		19			
	Bottom		17			
(a) 10:30AM	Surface		17			
	Mid-depth		20			
	Bottom		19			
Nov. 22 (a) 10:45AM	Surface		7			
	Mid-depth		9			
	Bottom		9			
(a) 11:00AM	Surface		7			
	Mid-depth		9			
	Bottom		9			

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 22 (a) 11:15AM	Surface		9			
	Mid-depth		9			
	Bottom		9			
(a) 11:30AM	Surface		9			
	Mid-depth		11			
	Bottom		7			
Nov. 23 (a) 11:45AM	Surface		69			
	Mid-depth		400			
	Bottom		540			
(a) 12:00AM	Surface		45			
	Mid-depth		520			
	Bottom		920			
(a) 12:15PM	Surface		53			
	Mid-depth		420			
	Bottom		920			
(a) 12:30PM	Surface		91			
	Mid-depth		640			
	Bottom		1,360			
Dec. 1 (a) 7:00AM	Surface		7			
	Mid-depth		5			
	Bottom		5			
(a) 7:15AM	Surface		5			
	Mid-depth		3			
	Bottom		5			
Dec. 2 (a) 7:00AM	Surface		7			
	Mid-depth		3			
	Bottom		4			
(a) 7:15AM	Surface		3			
	Mid-depth		5			
	Bottom		4			
(a) 7:30AM	Surface		7			
	Mid-depth		5			
	Bottom		3			
(a) 7:45AM	Surface		5			
	Mid-depth		5			
	Bottom		5			

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 2 (a) 8:00AM	Surface		5			
	Mid-depth		3			
	Bottom		5			
Dec. 3 (a) 8:00AM	Surface		4			
	Mid-depth		5			
	Bottom		9			
(a) 8:15AM	Surface		4			
	Mid-depth		3			
	Bottom		5			
(a) 8:30AM	Surface		4			
	Mid-depth		5			
	Bottom		7			
Dec. 4 (a) 9:00AM	Surface		161			
	Mid-depth		2,550			
	Bottom		2,350			
(a) 9:15AM	Surface		61			
	Mid-depth		2,950			
	Bottom		2,350			
(a) 9:30AM	Surface		320			
	Mid-depth		2,900			
	Bottom		2,600			
(a) 9:45AM	Surface		400			
	Mid-depth		3,900			
	Bottom		2,600			
Dec. 6 (a) 10:00AM	Surface		7			
	Mid-depth		400			
	Bottom		1,200			
(a) 10:15AM	Surface		15			
	Mid-depth		860			
	Bottom		1,300			
(a) 10:30AM	Surface		23			
	Mid-depth		960			
	Bottom		3,700			
Dec. 7 (a) 11:00AM	Surface		37			
	Mid-depth		65			
	Bottom		1,720			

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 7 (a) 11:15AM	Surface		37			
	Mid-depth		1,020			
	Bottom		1,960			
Dec. 8 (a) 11:15AM	Surface		11			
	Mid-depth		13			
	Bottom		300			
(a) 11:30AM	Surface		11			
	Mid-depth		11			
	Bottom		63			
(a) 11:45AM	Surface		9			
	Mid-depth		11			
	Bottom		300			
(a) 12:00AM	Surface		11			
	Mid-depth		11			
	Bottom		400			
Dec. 9 (a) 12:15PM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 12:30PM	Surface		5			
	Mid-depth		5			
	Bottom		9			
(a) 12:45PM	Surface		7			
	Mid-depth		6			
	Bottom		5			
Dec. 10 (a) 1:15PM	Surface		131			
	Mid-depth		29			
	Bottom		1,010			
(a) 1:30PM	Surface		17			
	Mid-depth		23			
	Bottom		750			
(a) 1:45PM	Surface		11			
	Mid-depth		27			
	Bottom		230			
Dec. 18 (a) 8:00AM	Surface		1,000			
	Mid-depth		6,400			
	Bottom		7,800			

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 18 (a) 8:15AM	Surface		7,400			
	Mid-depth		1,000			
	Bottom		5,000			
(a) 8:30AM	Surface		1,700			
	Mid-depth		5,200			
	Bottom		7,600			
Dec. 20 (a) 10:00AM	Surface		11			
	Mid-depth		13			
	Bottom		15			
(a) 10:15AM	Surface		13			
	Mid-depth		17			
	Bottom		13			
Dec. 24 (a) 1:30PM	Surface		260			
	Mid-depth		2,400			
	Bottom		4,200			
(a) 1:45PM	Surface		260			
	Mid-depth		2,500			
	Bottom		4,500			
(a) 2:00PM	Surface		280			
	Mid-depth		2,400			
	Bottom		5,000			
1938						
Jan. 7 11:50AM	Surface	119	122		159	
	Mid-depth	370	1,740		3,400	
	Bottom	1,700	5,350		480	
Jan. 15 (a) 7:00AM	Surface		710			
	Mid-depth		9,450			
	Bottom		9,800			
(a) 7:10AM	Surface		820			
	Mid-depth		9,600			
	Bottom		10,000			
(a) 7:20AM	Surface		810			
	Mid-depth		7,200			
	Bottom		10,450			

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 15 (a) 7:30AM	Surface		1,060			
	Mid-depth		10,300			
	Bottom		10,800			
Jan. 17 (a) 9:00AM	Surface		5,800			
	Mid-depth		6,850			
	Bottom		7,600			
(a) 9:10AM	Surface		7,700			
	Mid-depth		6,500			
	Bottom		8,600			
Jan. 18 10:00AM	Surface		1,200			
	Mid-depth		5,700			
	Bottom		8,100			
Jan. 19 (a) 10:00AM	Surface		900			
	Mid-depth		3,500			
	Bottom		5,100			
(a) 10:15AM	Surface		790			
	Mid-depth		2,800			
	Bottom		5,500			
(a) 10:30AM	Surface		1,130			
	Mid-depth		5,400			
	Bottom		7,300			
(a) 10:45AM	Surface		900			
	Mid-depth		4,500			
	Bottom		8,100			
Jan. 20 (a) 11:00AM	Surface		850			
	Mid-depth		2,150			
	Bottom		4,900			
(a) 11:15AM	Surface		470			
	Mid-depth		2,650			
	Bottom		4,450			
(a) 11:30AM	Surface		490			
	Mid-depth		2,750			
	Bottom		5,200			
(a) 11:45AM	Surface		860			
	Mid-depth		2,350			
	Bottom		4,750			

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 21 (f) 11:57AM (12A)	Surface					620
	Mid-depth					2,800
	Bottom					5,700
(f) 12:12PM (12A)	Surface					660
	Mid-depth					2,500
	Bottom					5,850
(f) 12:27PM (12A)	Surface					540
	Mid-depth					2,600
	Bottom					6,700
(f) 12:42PM (12A)	Surface					580
	Mid-depth					5,000
	Bottom					6,350
Jan. 22 (f) 12:54PM (12A)	Surface					750
	Mid-depth					2,400
	Bottom					5,900
(f) 1:09PM (12A)	Surface					910
	Mid-depth					5,200
	Bottom					10,100
(f) 1:24PM (12A)	Surface					880
	Mid-depth					6,100
	Bottom					9,100
(f) 1:39PM (12A)	Surface					980
	Mid-depth					7,550
	Bottom					11,600
Feb. 2 (a) 9:00AM	Surface		5			
	Mid-depth		4			
	Bottom		6			
(a) 9:15AM	Surface		7			
	Mid-depth		8			
	Bottom		8			
(a) 9:30AM	Surface		7			
	Mid-depth		4			
	Bottom		8			
(a) 9:45AM	Surface		13			
	Mid-depth		6			
	Bottom		10			

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 3 (a) 10:00AM	Surface		5			
	Mid-depth		6			
	Bottom		8			
(a) 10:15AM	Surface		7			
	Mid-depth		4			
	Bottom		8			
(a) 10:30AM	Surface		5			
	Mid-depth		9			
	Bottom		9			
Feb. 4 11:00AM	Surface		7			
	Mid-depth		5			
	Bottom		9			
Feb. 6 (a) 12:05PM	Surface	5	9		10	
	Mid-depth	6	5		6	
	Bottom	5	5		9	
(a) 12:35PM	Surface	7	5		8	
	Mid-depth	5	10		6	
	Bottom	8	19		6	
Feb. 7 (a) 1:05PM	Surface	7	11		9	
	Mid-depth	5	3		5	
	Bottom	7	5		11	
(a) 1:35PM	Surface	7	4		18	
	Mid-depth	9	5		5	
	Bottom	5	5		5	
Feb. 8 (e) 2:50PM (12A)	Surface					7
	Mid-depth					5
	Bottom					6
Feb. 9 (e) 3:17PM (12A)	Surface					3
	Mid-depth					5
	Bottom					5
(a) 3:35PM	Surface	3	3		3	
	Mid-depth	3	3		3	
	Bottom	3	7		5	
Feb. 10 4:20PM	Surface	3	5		3	
	Mid-depth	11	3		5	
	Bottom	3	13		9	

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Feb. 19	Surface	7	7		8	
11:35AM	Mid-depth	68	9		11	
	Bottom	320	27		13	
Feb. 20	Surface		620			
1:00PM	Mid-depth		3,000			
	Bottom		2,500			
Feb. 22	Surface	8	20		19	
2:55PM	Mid-depth	1,540	159		131	
	Bottom	4,800	3,100		4,200	
Feb. 23	Surface	9	7		11	
3:50PM	Mid-depth	47	41		24	
	Bottom	2,950	1,900		1,500	
Feb. 24	Surface	300	360		450	
4:45PM	Mid-depth	4,600	5,400		3,100	
	Bottom	9,200	7,000		11,000	
Feb. 26	Surface		320			
6:00AM	Mid-depth		7,800			
	Bottom		8,800			
Mar. 8	Surface	8	9		10	
1:20PM	Mid-depth	11	8		13	
	Bottom	9	8		14	
Mar. 9	Surface	156	178		281	
2:25PM	Mid-depth	890	600		290	
	Bottom	2,200	1,400		1,500	
Mar. 10	Surface	1,000	610		340	
3:35PM	Mid-depth	8,850	4,500		2,000	
	Bottom	12,050	7,950		8,500	
Mar. 21	Surface	11	11	9	15	15
12:00AM	Mid-depth	11	12	8	13	16
	Bottom	223	17	9	16	26
Mar. 22	Surface	8	8	8	6	11
1:00PM	Mid-depth	33	6	9	10	17
	Bottom	2,000	9	7	16	22
Mar. 23	Surface	8	3	6	6	6
2:25PM	Mid-depth	9	4	5	6	7
	Bottom	2,950	6	10	15	5

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations				
		8	9	10	11	12
1938						
Mar. 24	Surface	7	4	5	4	5
3:15PM	Mid-depth	3	5	4	4	5
	Bottom	5	5	3	3	6
Mar. 25	Surface	3	2	3	3	1
4:15PM	Mid-depth	2	2	3	4	3
	Bottom	5	3	4	4	4
Mar. 29 (a)	Surface		4			
6:30AM	Mid-depth		1			
	Bottom		2			
(a)	Surface		1			
6:45AM	Mid-depth		1			
	Bottom		3			
Apr. 8 (a)	Surface	4				
2:35PM	Mid-depth	7				
	Bottom	15				
(a)	Surface		17	6	5	3
3:30PM	Mid-depth		7	6	5	4
	Bottom		4	9	6	5
Apr. 9 (a)	Surface	8	8			
3:40PM	Mid-depth	21	11			
	Bottom	1,220	39			
(a)	Surface			14	15	33
4:30PM	Mid-depth			96	70	33
	Bottom			600	950	82
Apr. 10 (a)	Surface	4	4	3		
4:40PM	Mid-depth	5	5	3		
	Bottom	3	7	3		
(a)	Surface				7	6
5:25PM	Mid-depth				6	5
	Bottom				5	11
Apr. 21 (a)	Surface	1	1	2		
1:05PM	Mid-depth	2	3	2		
	Bottom	2	4	1		
(a)	Surface					3
1:50PM	Mid-depth					3
	Bottom					3

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Apr. 22 (a)	Surface	3	2	2	6	3
2:30PM	Mid-depth	3	5	1	6	3
	Bottom	3	2	3	6	2
Apr. 27 (a)	Surface	2	3		21	
5:45AM	Mid-depth	4	2		4	
	Bottom	4	5		5	
(a)	Surface		3			
6:00AM	Mid-depth		4			
	Bottom		3			
(a)	Surface		9			
6:15AM	Mid-depth		3			
	Bottom		2			
Apr. 28 (a)	Surface	5	4		6	
6:40AM	Mid-depth	4	3		5	
	Bottom	6	5		8	
(a)	Surface		4			
7:00AM	Mid-depth		2			
	Bottom		6			
Apr. 30	Surface		7			
8:30AM	Mid-depth		9			
	Bottom		13			
May 1 (a)	Surface	7	8		9	
8:45AM	Mid-depth	5	5		9	
	Bottom	13	25		9	
(a)	Surface		7			
9:00AM	Mid-depth		7			
	Bottom		25			
(a)	Surface		7			
9:15AM	Mid-depth		9			
	Bottom		10			
May 2 (a)	Surface	7				
9:20AM	Mid-depth	7				
	Bottom	7				
(a)	Surface		6			
9:30AM	Mid-depth		7			
	Bottom		14			

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
May 2 (a) 9:45AM	Surface		7			
	Mid-depth		6			
	Bottom		14			
(a) 10:00AM	Surface		6			
	Mid-depth		8			
	Bottom		12			
May 3 (a) 10:15AM	Surface	8	7		10	
	Mid-depth	14	8		11	
	Bottom	15	14		12	
(a) 10:30AM	Surface		7			
	Mid-depth		9			
	Bottom		11			
(a) 10:45AM	Surface		7			
	Mid-depth		10			
	Bottom		13			
(a) 11:00AM	Surface		9			
	Mid-depth		13			
	Bottom		14			
May 4 (a) 11:19AM	Surface	7	8	9	11	
	Mid-depth	10	13	15	15	
	Bottom	11	14	22	21	
(a) 12:04PM	Surface					28
	Mid-depth					29
	Bottom					28
May 5 (a) 12:15PM	Surface		13			
	Mid-depth		12			
	Bottom		19			
(a) 12:30PM	Surface		9			
	Mid-depth		15			
	Bottom		20			
(a) 12:45PM	Surface		16			
	Mid-depth		20			
	Bottom		21			
(a) 1:00PM	Surface		24			
	Mid-depth		26			
	Bottom		26			

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 6 (a) 1:15PM	Surface		59			
	Mid-depth		124			
	Bottom		232			
(a) 1:30PM	Surface		55			
	Mid-depth		135			
	Bottom		200			
May 6 (a) 1:45PM	Surface		45			
	Mid-depth		288			
	Bottom		530			
(a) 2:00PM	Surface		215			
	Mid-depth		460			
	Bottom		680			
May 7 (a) 2:15PM	Surface		15			
	Mid-depth		13			
	Bottom		43			
(a) 2:30PM	Surface		12			
	Mid-depth		39			
	Bottom		52			
(a) 2:45PM	Surface		20			
	Mid-depth		30			
	Bottom		67			
(a) 3:00PM	Surface		25			
	Mid-depth		112			
	Bottom		139			
May 9 4:45PM	Surface	900	900		500	
	Mid-depth	5,600	6,200		1,000	
	Bottom	9,100	7,400		8,300	
May 10 5:36PM	Surface					330
	Mid-depth					350
	Bottom					1,350
May 11 6:37AM	Surface			330	300	400
	Mid-depth			700	600	400
	Bottom			1,450	1,750	450
May 13 (a) 7:10AM	Surface	480	330		260	
	Mid-depth	1,160	700		350	
	Bottom	1,990	740		490	

Table 11 (continued) Tide cycle: 3-4 hours after low tide

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1938						
May 13 (a)	Surface		270			
7:30AM	Mid-depth		910			
	Bottom		800			
(a)	Surface		320			
7:45AM	Mid-depth		820			
	Bottom		1,000			
(a)	Surface		300			
8:00AM	Mid-depth		850			
	Bottom		1,350			
May 20	Surface	18	10		7	
12:50PM	Mid-depth	320	400		8	
	Bottom	1,550	830		570	
May 21	Surface	54	182		17	
1:45PM	Mid-depth	4,400	1,320		203	
	Bottom	8,450	5,450		5,650	
June 24	Surface				1,700	
5:30AM	Mid-depth				4,900	
	Bottom				10,050	
July 6	Surface				1,300	
4:45AM	Mid-depth				9,200	
	Bottom				7,450	
Aug. 24	Surface	2,400	2,300		1,400	
6:50AM	Mid-depth	6,600	4,150		4,100	
	Bottom	7,250	5,950		5,150	

Table 12 Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 18 (a) 8:00AM	Surface		15			
	Mid-depth		11			
	Bottom		13			
(a) 8:15AM	Surface		11			
	Mid-depth		9			
	Bottom		11			
(a) 8:30AM	Surface		7			
	Mid-depth		11			
	Bottom		11			
(a) 8:45AM	Surface		9			
	Mid-depth		43			
	Bottom		15			
(a) 8:45PM	Surface		5			
	Mid-depth		9			
	Bottom		7			
(a) 9:00PM	Surface		9			
	Mid-depth		7			
	Bottom		7			
(a) 9:15PM	Surface		7			
	Mid-depth		7			
	Bottom		7			
(a) 9:30PM	Surface		6			
	Mid-depth		7			
	Bottom		9			
Nov. 19 (a) 9:00AM	Surface		23			
	Mid-depth		55			
	Bottom		79			
(a) 9:15AM	Surface		19			
	Mid-depth		19			
	Bottom		21			
(a) 9:30AM	Surface		23			
	Mid-depth		21			
	Bottom		21			
(a) 9:45AM	Surface		23			
	Mid-depth		290			
	Bottom		240			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 20 (a) 9:45AM	Surface		20			
	Mid-depth		20			
	Bottom		18			
(a) 10:00AM-	Surface		22			
	Mid-depth		24			
	Bottom		19			
(a) 10:15AM	Surface		51			
	Mid-depth		3,150			
	Bottom		8,950			
(a) 10:30AM	Surface		54			
	Mid-depth		2,050			
	Bottom		9,200			
Nov. 21 (a) 10:45AM	Surface		24			
	Mid-depth		22			
	Bottom		24			
(a) 11:00AM	Surface		23			
	Mid-depth		153			
	Bottom		312			
(a) 11:15AM	Surface		28			
	Mid-depth		2,900			
	Bottom		6,400			
(a) 11:30AM	Surface		640			
	Mid-depth		5,800			
	Bottom		9,550			
Nov. 22 (a) 11:45AM	Surface		20			
	Mid-depth		45			
	Bottom		41			
(a) 12:00AM	Surface		24			
	Mid-depth		35			
	Bottom		40			
(a) 12:15PM	Surface		23			
	Mid-depth		43			
	Bottom		40			
(a) 12:30PM	Surface		23			
	Mid-depth		29			
	Bottom		48			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Nov. 23 (a) 12:45PM	Surface		93			
	Mid-depth		300			
	Bottom		1,600			
(a) 1:00PM	Surface		151			
	Mid-depth		660			
	Bottom		1,800			
(a) 1:15PM	Surface		157			
	Mid-depth		3,350			
	Bottom		4,900			
(a) 1:30PM	Surface		139			
	Mid-depth		2,700			
	Bottom		4,800			
Nov. 27 (a) 5:00AM	Surface		3,850			
	Mid-depth		10,200			
	Bottom		11,100			
(a) 5:15AM	Surface		10,650			
	Mid-depth		10,600			
	Bottom		10,800			
Nov. 30 (a) 7:00AM	Surface		15			
	Mid-depth		5			
	Bottom		5			
(a) 7:15AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 7:30AM	Surface		5			
	Mid-depth		5			
	Bottom		3			
Dec. 1 (a) 7:30AM	Surface		9			
	Mid-depth		3			
	Bottom		3			
(a) 7:45AM	Surface		9			
	Mid-depth		5			
	Bottom		7			
(a) 8:00AM	Surface		4			
	Mid-depth		5			
	Bottom		3			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 1 (a) 8:15AM	Surface		4			
	Mid-depth		3			
	Bottom		5			
Dec. 2 (a) 8:15AM	Surface		5			
	Mid-depth		5			
	Bottom		3			
(a) 8:30AM	Surface		3			
	Mid-depth		3			
	Bottom		5			
(a) 8:45AM	Surface		5			
	Mid-depth		7			
	Bottom		3			
(a) 9:00AM	Surface		5			
	Mid-depth		3			
	Bottom		5			
Dec. 3 (a) 8:45AM	Surface		5			
	Mid-depth		3			
	Bottom		5			
(a) 9:00AM	Surface		5			
	Mid-depth		7			
	Bottom		5			
(a) 9:15AM	Surface		4			
	Mid-depth		5			
	Bottom		5			
(a) 9:30AM	Surface		4			
	Mid-depth		97			
	Bottom		860			
Dec. 4 (a) 10:00AM	Surface		380			
	Mid-depth		3,000			
	Bottom		3,000			
(a) 10:15AM	Surface		210			
	Mid-depth		3,400			
	Bottom		3,450			
(a) 10:30AM	Surface		75			
	Mid-depth		7,750			
	Bottom		2,050			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1937						
Dec. 4 (a)	Surface		82			
10:45AM	Mid-depth		7,650			
	Bottom		7,600			
(a)	Surface		77			
11:00AM	Mid-depth		6,400			
	Bottom		9,000			
Dec. 5 (a)	Surface		78			
10:00AM	Mid-depth		570			
	Bottom		1,310			
(a)	Surface		38			
10:15AM	Mid-depth		1,070			
	Bottom		2,600			
(a)	Surface		19			
10:30AM	Mid-depth		3,500			
	Bottom		5,150			
(a)	Surface		23			
10:45AM	Mid-depth		5,750			
	Bottom		6,850			
Dec. 6 (a)	Surface		33			
10:45AM	Mid-depth		1,780			
	Bottom		5,400			
(a)	Surface		131			
11:00AM	Mid-depth		3,800			
	Bottom		4,800			
(a)	Surface		173			
11:15AM	Mid-depth		740			
	Bottom		7,000			
(a)	Surface		143			
11:30AM	Mid-depth		3,900			
	Bottom		9,600			
Dec. 7 (a)	Surface		35			
11:30AM	Mid-depth		35			
	Bottom		2,000			
(a)	Surface		27			
11:45AM	Mid-depth		39			
	Bottom		1,180			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1937						
Dec. 7 (a) 12:00MM	Surface		27			
	Mid-depth		1,200			
	Bottom		1,440			
(a) 12:15PM	Surface		23			
	Mid-depth		53			
	Bottom		1,860			
Dec. 8 (a) 12:15PM	Surface		13			
	Mid-depth		11			
	Bottom		360			
(a) 12:30PM	Surface		29			
	Mid-depth		33			
	Bottom		340			
(a) 12:45PM	Surface		29			
	Mid-depth		37			
	Bottom		1,860			
(a) 1:00PM	Surface		33			
	Mid-depth		87			
	Bottom		1,320			
Dec. 9 (a) 1:00PM	Surface		7			
	Mid-depth		4			
	Bottom		7			
(a) 1:15PM	Surface		7			
	Mid-depth		7			
	Bottom		7			
(a) 1:30PM	Surface		7			
	Mid-depth		5			
	Bottom		5			
(a) 1:45PM	Surface		7			
	Mid-depth		7			
	Bottom		7			
Dec. 10 (a) 2:00PM	Surface		9			
	Mid-depth		13			
	Bottom		1,050			
(a) 2:15PM	Surface		13			
	Mid-depth		13			
	Bottom		490			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 10 (a) 2:30PM	Surface		45			
	Mid-depth		660			
	Bottom		2,210			
(a) 2:45PM	Surface		21			
	Mid-depth		880			
	Bottom		2,010			
Dec. 13 5:00AM	Surface		1,200			
	Mid-depth		10,700			
	Bottom		11,000			
Dec. 14 6:00AM	Surface		1,000			
	Mid-depth		4,500			
	Bottom		11,000			
Dec. 15 (a) 6:00AM	Surface		9,300			
	Mid-depth		12,200			
	Bottom		12,300			
(a) 6:15AM	Surface		9,200			
	Mid-depth		11,200			
	Bottom		12,500			
(a) 6:30AM	Surface		6,600			
	Mid-depth		9,400			
	Bottom		12,900			
(a) 6:45AM	Surface		5,300			
	Mid-depth		8,300			
	Bottom		10,800			
Dec. 16 (a) 7:00AM	Surface					
	Mid-depth		12,100			
	Bottom		13,100			
(a) 7:15AM	Surface		10,200			
	Mid-depth		11,650			
	Bottom		12,800			
(a) 7:30AM	Surface		12,150			
	Mid-depth		13,450			
	Bottom		13,300			
(a) 7:45AM	Surface		11,850			
	Mid-depth		16,500			
	Bottom		13,400			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 17 (a) 8:00AM	Surface		5,300			
	Mid-depth		10,700			
	Bottom		12,500			
(a) 8:15AM	Surface		6,000			
	Mid-depth		12,300			
	Bottom		12,800			
(a) 8:30AM	Surface		6,400			
	Mid-depth		11,400			
	Bottom		13,500			
Dec. 18 (a) 8:45AM	Surface		4,400			
	Mid-depth		9,650			
	Bottom		9,100			
(a) 9:00AM	Surface		6,700			
	Mid-depth		10,100			
	Bottom		9,500			
(a) 9:15AM	Surface		5,650			
	Mid-depth		12,200			
	Bottom		12,600			
(a) 9:30AM	Surface		6,100			
	Mid-depth		12,100			
	Bottom		12,600			
Dec. 20 (a) 10:30AM	Surface		17			
	Mid-depth		19			
	Bottom		19			
(a) 10:45AM	Surface		23			
	Mid-depth		25			
	Bottom		57			
(a) 11:00AM	Surface		45			
	Mid-depth		2,800			
	Bottom		5,100			
(a) 11:15AM	Surface		45			
	Mid-depth		5,900			
	Bottom		8,250			
Dec. 24 (a) 2:15PM	Surface		580			
	Mid-depth		5,100			
	Bottom		7,800			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1937						
Dec. 24 (a) 2:30PM	Surface		760			
	Mid-depth		7,600			
	Bottom		7,900			
(a) 2:45PM	Surface		1,060			
	Mid-depth		7,300			
	Bottom		8,000			
(a) 3:00PM	Surface		1,600			
	Mid-depth		7,200			
	Bottom		7,500			
1938						
Jan. 7 12:50PM	Surface	1,960	1,460		880	
	Mid-depth	5,200	4,100		5,900	
	Bottom	8,200	8,900		7,600	
Jan. 14 (a) 7:00AM	Surface		4,800			
	Mid-depth		11,200			
	Bottom		12,600			
(a) 7:10AM	Surface		5,250			
	Mid-depth		10,800			
	Bottom		10,700			
(a) 7:20AM	Surface		2,550			
	Mid-depth		11,900			
	Bottom		13,600			
(a) 7:30AM	Surface		3,300			
	Mid-depth		11,900			
	Bottom		13,100			
Jan. 15 (a) 7:40AM	Surface		1,300			
	Mid-depth		11,350			
	Bottom		11,200			
(a) 7:50AM	Surface		1,340			
	Mid-depth		11,150			
	Bottom		12,000			
(a) 8:00AM	Surface		2,050			
	Mid-depth		11,750			
	Bottom		12,400			
(a) 8:10AM	Surface		2,400			
	Mid-depth		13,650			
	Bottom		13,650			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 15 (a) 8:20 A.M.	Surface		5,800			
	Mid-depth		12,850			
	Bottom		13,450			
(a) 8:30 A.M.	Surface		3,900			
	Mid-depth		13,000			
	Bottom		13,800			
Jan. 16 (a) 8:30 A.M.	Surface		2,250			
	Mid-depth		9,500			
	Bottom		9,750			
(a) 8:40 A.M.	Surface		2,700			
	Mid-depth		9,350			
	Bottom		9,450			
(a) 8:50 A.M.	Surface		3,650			
	Mid-depth		9,600			
	Bottom		10,100			
(a) 9:00 A.M.	Surface		3,000			
	Mid-depth		10,550			
	Bottom		10,800			
(a) 9:10 A.M.	Surface		4,200			
	Mid-depth		11,400			
	Bottom		11,050			
(a) 9:20 A.M.	Surface		4,850			
	Mid-depth		12,350			
	Bottom		12,050			
Jan. 17 (a) 9:20 A.M.	Surface		6,400			
	Mid-depth		8,200			
	Bottom		8,900			
(a) 9:30 A.M.	Surface		8,400			
	Mid-depth		8,700			
	Bottom		9,200			
(a) 9:40 A.M.	Surface		1,700			
	Mid-depth		9,300			
	Bottom		10,800			
(a) 9:50 A.M.	Surface		2,900			
	Mid-depth		8,400			
	Bottom		10,700			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million				
		Stations				
		8	9	10	11	12
1938						
Jan. 17 (a) 10:00 M.	Surface		5,700			
	Mid-depth		10,800			
	Bottom		11,500			
(a) 10:10 M.	Surface		5,000			
	Mid-depth		10,600			
	Bottom		12,200			
Jan. 18 (a) 10:10 M.	Surface		1,600			
	Mid-depth		7,800			
	Bottom		9,000			
(a) 10:20 M.	Surface		2,000			
	Mid-depth		8,450			
	Bottom		9,500			
(a) 10:30 M.	Surface		2,500			
	Mid-depth		9,850			
	Bottom		10,500			
(a) 10:40 M.	Surface		2,600			
	Mid-depth		10,800			
	Bottom		10,600			
(a) 10:50 M.	Surface		2,700			
	Mid-depth		11,100			
	Bottom		10,200			
(a) 11:00 M.	Surface		3,200			
	Mid-depth		11,100			
	Bottom		11,600			
Jan. 19 (a) 11:00 M.	Surface		1,140			
	Mid-depth		4,600			
	Bottom		7,300			
(a) 11:15 M.	Surface		1,400			
	Mid-depth		5,100			
	Bottom		9,200			
(a) 11:30 M.	Surface		3,050			
	Mid-depth		4,800			
	Bottom		8,100			
(a) 11:45 M.	Surface		2,000			
	Mid-depth		10,100			
	Bottom		10,500			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Jan. 20 (a) 12:00M	Surface		640			
	Mid-depth		3,600			
	Bottom		6,800			
(a) 12:15PM	Surface		1,060			
	Mid-depth		3,450			
	Bottom		6,800			
(a) 12:30PM	Surface		840			
	Mid-depth		4,300			
	Bottom		9,000			
(a) 12:45PM	Surface		980			
	Mid-depth		8,700			
	Bottom		9,650			
Jan. 21 (a) 12:57PM	Surface					570
	Mid-depth					3,000
	Bottom					6,900
(a) 1:12PM	Surface					550
	Mid-depth					5,300
	Bottom					3,500
(a) 1:27PM	Surface					620
	Mid-depth					5,800
	Bottom					9,200
(a) 1:42PM	Surface					620
	Mid-depth					6,150
	Bottom					10,700
Jan. 22 (a) 1:54PM	Surface					980
	Mid-depth					6,150
	Bottom					9,400
(a) 2:09PM	Surface					820
	Mid-depth					8,100
	Bottom					12,000
(a) 2:24PM	Surface					930
	Mid-depth					9,400
	Bottom					12,050
(a) 2:39PM	Surface					890
	Mid-depth					11,300
	Bottom					12,600

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 2 (a) 10:00AM	Surface		9			
	Mid-depth		12			
	Bottom		15			
(a) 10:15AM	Surface		17			
	Mid-depth		6			
	Bottom		11			
(a) 10:30AM	Surface		5			
	Mid-depth		7			
	Bottom		9			
(a) 10:45AM	Surface		11			
	Mid-depth		11			
	Bottom		13			
Feb. 3 (a) 10:45AM	Surface		13			
	Mid-depth		15			
	Bottom		14			
(a) 11:00AM	Surface		15			
	Mid-depth		19			
	Bottom		26			
(a) 11:15AM	Surface		24			
	Mid-depth		29			
	Bottom		49			
Feb. 4 (a) 11:15AM	Surface		5			
	Mid-depth		3			
	Bottom		7			
(a) 11:30AM	Surface		3			
	Mid-depth		7			
	Bottom		7			
(a) 11:45AM	Surface		5			
	Mid-depth		5			
	Bottom		5			
(a) 12:00M	Surface		5			
	Mid-depth		9			
	Bottom		5			
Feb. 6 (a) 1:05PM	Surface	7	15		8	
	Mid-depth	12	13		16	
	Bottom	20	7		10	

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 6 (a)	Surface	10	7		8	
1:35PM	Mid-depth	10	8		8	
	Bottom	9	9		14	
Feb. 7 (a)	Surface	7	5		5	
2:05PM	Mid-depth	7	7		5	
	Bottom	9	7		5	
(a)	Surface	9	7		5	
2:35PM	Mid-depth	5	7		5	
	Bottom	3			7	
Feb. 8	Surface	7	5		7	
3:05PM	Mid-depth	5	9		7	
	Bottom	7	7		9	
Feb. 9	Surface	5	5		3	
4:35PM	Mid-depth	3	3		6	
	Bottom	4	3		13	
Feb. 19	Surface	60	76		21	
12:35PM	Mid-depth	760	360		24	
	Bottom	2,900	760		860	
Feb. 20 (a)	Surface		720			
1:15PM	Mid-depth		4,500			
	Bottom		6,000			
(a)	Surface		740			
1:30PM	Mid-depth		6,900			
	Bottom		8,700			
(a)	Surface		880			
1:45PM	Mid-depth		8,600			
	Bottom		9,900			
(a)	Surface		900			
2:00PM	Mid-depth		8,050			
	Bottom		10,900			
Feb. 25 (a)	Surface		6,400			
6:00AM	Mid-depth		10,800			
	Bottom		15,650			
(a)	Surface		2,800			
6:15AM	Mid-depth		10,800			
	Bottom		13,700			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Feb. 26 (a) 6:15AM	Surface		260			
	Mid-depth		6,800			
	Bottom		10,900			
(a) 6:30AM	Surface		340			
	Mid-depth		10,300			
	Bottom		12,200			
(a) 6:45AM	Surface		1,590			
	Mid-depth		9,500			
	Bottom		10,800			
(a) 7:00AM	Surface		1,820			
	Mid-depth		10,300			
	Bottom		12,000			
Feb. 27 (a) 7:00AM	Surface		880			
	Mid-depth		7,300			
	Bottom		9,700			
(a) 7:15AM	Surface		800			
	Mid-depth		9,150			
	Bottom		11,750			
(a) 7:30AM	Surface		1,000			
	Mid-depth		8,500			
	Bottom		11,150			
(a) 7:45AM	Surface		2,450			
	Mid-depth		8,500			
	Bottom		11,300			
Mar. 21 1:00PM	Surface	62	15	10	10	13
	Mid-depth	780	235	26	20	18
	Bottom		1,230	270	1,000	18
Mar. 22 2:00PM	Surface	17	13	13	9	19
	Mid-depth	1,150	20	7	9	11
	Bottom	3,100	670	16	850	11
Mar. 27 (a) 6:00AM	Surface		3			
	Mid-depth		1			
	Bottom		3			
(a) 6:15AM	Surface		2			
	Mid-depth		1			
	Bottom		2			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Mar. 27 (a) 6:30AM	Surface		2			
	Mid-depth		1			
	Bottom		2			
Mar. 29 (a) 7:00AM	Surface		3			
	Mid-depth		3			
	Bottom		3			
(a) 7:15AM	Surface		3			
	Mid-depth		7			
	Bottom		4			
(a) 7:30AM	Surface		1			
	Mid-depth		3			
	Bottom		1			
(a) 7:45AM	Surface		5			
	Mid-depth		1			
	Bottom		2			
Apr. 8 3:35PM	Surface	5				
	Mid-depth	11				
	Bottom	490				
Apr. 9 4:35PM	Surface	360	101			
	Mid-depth	2,550	800			
	Bottom	6,100	1,780			
Apr. 10 5:35PM	Surface	5	5	4		
	Mid-depth	6	5	4		
	Bottom	5	5	5		
Apr. 21 2:05PM	Surface	3	2	2	5	
	Mid-depth	2	2	2	2	
	Bottom	2	2	3	4	
Apr. 27 (a) 6:30AM	Surface		3			
	Mid-depth		4			
	Bottom		4			
(a) 6:45AM	Surface		3			
	Mid-depth		3			
	Bottom		5			
(a) 7:00AM	Surface		3			
	Mid-depth		4			
	Bottom		3			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Apr. 27 (a) 7:15AM	Surface		3			
	Mid-depth		1			
	Bottom		7			
Apr. 28 (a) 7:15AM	Surface		3			
	Mid-depth		4			
	Bottom		7			
(a) 7:30AM	Surface		2			
	Mid-depth		4			
	Bottom		6			
(a) 7:45AM	Surface		3			
	Mid-depth		4			
	Bottom		3			
(a) 8:00AM	Surface		2			
	Mid-depth		4			
	Bottom		4			
Apr. 29 8:15AM	Surface	7	5	5	8	10
	Mid-depth	7	9	8	10	9
	Bottom	5	9	9	13	8
Apr. 30 (a) 8:45AM	Surface		7			
	Mid-depth		9			
	Bottom		43			
(a) 9:00AM	Surface		11			
	Mid-depth		12			
	Bottom		69			
(a) 9:15AM	Surface		13			
	Mid-depth		15			
	Bottom		44			
(a) 9:30AM	Surface		30			
	Mid-depth		210			
	Bottom		3,200			
May 1 (a) 9:30AM	Surface		7			
	Mid-depth		6			
	Bottom		13			
(a) 9:45AM	Surface		9			
	Mid-depth		8			
	Bottom		10			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 1 (a) 10:00AM	Surface		8			
	Mid-depth		10			
	Bottom		15			
(a) 10:15AM	Surface		11			
	Mid-depth		11			
	Bottom		11			
May 2 (a) 10:15AM	Surface		6			
	Mid-depth		7			
	Bottom		15			
(a) 10:30AM	Surface		11			
	Mid-depth		9			
	Bottom		9			
(a) 10:45AM	Surface		13			
	Mid-depth		13			
	Bottom		13			
(a) 11:00AM	Surface		19			
	Mid-depth		19			
	Bottom		17			
May 3 (a) 11:15AM	Surface		15			
	Mid-depth		17			
	Bottom		20			
(a) 11:30AM	Surface		23			
	Mid-depth		23			
	Bottom		20			
(a) 11:45AM	Surface		35			
	Mid-depth		41			
	Bottom		550			
(a) 12:00AM	Surface		32			
	Mid-depth		2,850			
	Bottom		7,050			
May 4 (a) 12:19PM	Surface	27	25	20	29	
	Mid-depth	28	23	21	24	
	Bottom	25	22	22	28	
(a) 1:04PM	Surface					92
	Mid-depth					111
	Bottom					172

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 5 (a) 1:15PM	Surface		43			
	Mid-depth		44			
	Bottom		40			
(a) 1:30PM	Surface		56			
	Mid-depth		110			
	Bottom		280			
(a) 1:45PM	Surface		104			
	Mid-depth		2,700			
	Bottom		6,300			
(a) 2:00PM	Surface		129			
	Mid-depth		4,900			
	Bottom		9,250			
May 6 (a) 2:15PM	Surface		260			
	Mid-depth		540			
	Bottom		870			
(a) 2:30PM	Surface		340			
	Mid-depth		1,230			
	Bottom		2,050			
(a) 2:45PM	Surface		370			
	Mid-depth		1,750			
	Bottom		3,950			
(a) 3:00PM	Surface		110			
	Mid-depth		2,250			
	Bottom		8,000			
May 7 (a) 3:15PM	Surface		45			
	Mid-depth		173			
	Bottom		206			
(a) 3:30PM	Surface		55			
	Mid-depth		710			
	Bottom		880			
(a) 3:45PM	Surface		61			
	Mid-depth		2,150			
	Bottom		5,700			
(a) 4:00PM	Surface		131			
	Mid-depth		5,150			
	Bottom		7,150			

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations				
		8	9	10	11	12
1938						
May 8	Surface	650	3,290		510	
4:25PM	Mid-depth	9,600	8,850		7,200	
	Bottom	9,500	9,800		9,400	
May 9 (a)	Surface		790			
5:00AM	Mid-depth		5,300			
	Bottom		6,900			
(a)	Surface		740			
5:15AM	Mid-depth		5,750			
	Bottom		7,900			
(a)	Surface		1,130			
5:30AM	Mid-depth		7,650			
	Bottom		9,500			
May 10 (a)	Surface	810	490	470	260	
5:51AM	Mid-depth	3,150	1,500	1,100	700	
	Bottom	4,000	3,400	1,700	2,900	
(a)	Surface					560
6:36AM	Mid-depth					700
	Bottom					500
May 11 (a)	Surface	610	490			
6:42AM	Mid-depth	2,450	950			
	Bottom	2,900	1,550			
(a)	Surface		560	740	700	580
7:42AM	Mid-depth		7,250	4,000	2,450	700
	Bottom		9,250	8,800	8,600	1,500
May 13 (a)	Surface		310			
8:15AM	Mid-depth		750			
	Bottom		1,550			
(a)	Surface		720			
8:30AM	Mid-depth		2,350			
	Bottom		2,550			
(a)	Surface		640			
8:45AM	Mid-depth		4,150			
	Bottom		4,850			
May 18	Surface					23
12:36PM	Mid-depth					24
	Bottom					26

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
May 19 1:05PM	Surface	15	15		18	
	Mid-depth	1,130	12		16	
	Bottom	7,000	58		51	
May 20 1:50PM	Surface	48	25		30	
	Mid-depth	3,450	1,500		360	
	Bottom	7,250	5,600		4,700	
May 21 2:45PM	Surface	161	270		67	
	Mid-depth	10,600	8,850		1,850	
	Bottom	12,200	11,450		11,800	
June 8 5:35PM	Surface	2,400	1,400		760	
	Mid-depth	6,300	4,400		5,000	
	Bottom	8,300	6,250		6,100	
June 9 6:35AM	Surface	2,500	1,800		1,100	
	Mid-depth	9,100	7,600		5,300	
	Bottom	9,800	7,950		9,350	
June 10 7:35AM	Surface	2,800	2,000		1,200	
	Mid-depth	9,450	6,300		6,800	
	Bottom	9,750	7,250		7,000	
June 11 8:05AM	Surface	2,800	2,300		1,300	
	Mid-depth	8,850	7,200		6,050	
	Bottom	10,350	7,950		9,350	
June 12 8:35AM	Surface	3,900	1,100		1,600	
	Mid-depth	8,750	6,200		6,150	
	Bottom	9,450	7,400		7,300	
June 13 9:35AM	Surface	2,450	1,900		1,450	
	Mid-depth	10,700	8,750		9,350	
	Bottom	11,650	9,600		9,400	
June 14 10:05AM	Surface	1,050	690		190	
	Mid-depth	4,650	3,200		550	
	Bottom	7,200	3,800		2,950	
June 15 10:55AM	Surface	64	100		30	
	Mid-depth	7,200	2,700		32	
	Bottom	8,550	5,450		6,600	
June 16 11:35AM	Surface		600		53	
	Mid-depth	8,550	5,250		600	
	Bottom	10,400	7,600		7,800	

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
June 17 12:20PM	Surface	570	580		590	
	Mid-depth	10,700	9,000		2,950	
	Bottom	11,200	10,200		9,950	
June 18 1:05PM	Surface	1,480	1,280		1,140	
	Mid-depth	11,650	10,750		8,650	
	Bottom	10,450	11,300		11,250	
June 19 1:35PM	Surface	1,950	1,750		2,150	
	Mid-depth	975	5,850		6,600	
	Bottom	10,100	10,000		9,550	
June 20 2:35PM	Surface	7,100	5,200		3,600	
	Mid-depth	13,400	10,400		12,800	
	Bottom	13,700	13,350		13,650	
June 21 3:35PM	Surface	4,800	4,100		3,700	
	Mid-depth	11,400	11,400		9,600	
	Bottom	11,400	13,550		13,300	
June 22 3:50AM	Surface	4,900	3,650		2,500	
	Mid-depth	12,650	11,600		1,145	
	Bottom	13,450	12,050		12,450	
June 23 4:35AM	Surface	3,500	3,400			
	Mid-depth	9,250	7,350		8,250	
	Bottom	10,550	8,300		8,400	
June 24 5:35AM	Surface	3,200	3,100			
	Mid-depth	10,850	8,750			
	Bottom	10,950	10,300			
June 25 6:20AM	Surface	3,350	2,750		2,500	
	Mid-depth	9,500	7,800		6,800	
	Bottom	10,600	7,800		8,950	
June 26 7:20AM	Surface	3,950	4,500		3,700	
	Mid-depth	8,150	6,000		5,050	
	Bottom	9,250	7,450		7,450	
June 27 8:20AM	Surface	6,950	5,200		4,150	
	Mid-depth	12,350	10,500		7,800	
	Bottom	13,650	10,800		11,500	
June 28 9:20AM	Surface	2,550	2,550		1,500	
	Mid-depth	7,300	4,500		4,150	
	Bottom	10,750	8,700		6,800	

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
June 29 10:05AM	Surface	50	18		21	
	Mid-depth	53	20		24	
	Bottom	22	54		30	
June 30 11:05AM	Surface	26	16		25	
	Mid-depth	32	17		17	
	Bottom	31	20		41	
July 1 12:05PM	Surface	940	62		29	
	Mid-depth	5,550	990		166	
	Bottom	8,600	5,800		3,700	
July 2 1:05PM	Surface	510	158		175	
	Mid-depth	10,550	8,150		4,650	
	Bottom	11,300	9,150		9,000	
July 3 1:50PM	Surface	1,080	1,320		940	
	Mid-depth	11,650	8,200		9,600	
	Bottom	12,400	10,400		10,600	
July 4 2:50PM	Surface	2,200	2,650		1,000	
	Mid-depth	12,750	11,250		12,650	
	Bottom	13,500	9,900		12,650	
July 5 3:35PM	Surface	1,600	2,300		1,250	
	Mid-depth	12,800	9,350		9,150	
	Bottom	12,800	11,850		12,050	
July 6 4:50AM	Surface	2,300	2,250			
	Mid-depth	10,950	8,100			
	Bottom	11,600	10,450			
July 7 5:45AM	Surface				1,850	
	Mid-depth				11,650	
	Bottom				12,350	
July 8 6:45AM	Surface				1,500	
	Mid-depth				10,450	
	Bottom				11,850	
July 9 7:30AM	Surface				2,350	
	Mid-depth				11,650	
	Bottom				12,050	
July 10 7:50AM	Surface	5,200	2,850		2,500	
	Mid-depth	10,550	7,700		8,950	
	Bottom	11,900	10,700		11,450	

Table 13 (continued) Tide cycle: 4-5 hours after low tide

Parts per million

Date	Position	Stations				
		8	9	10	11	12
1938						
July 11	Surface	4,600	3,550		2,850	
8:35AM	Mid-depth	9,150	9,550		11,400	
	Bottom	12,300	10,700		11,600	
July 12	Surface	4,850	4,300		3,900	
9:05AM	Mid-depth	10,600	7,600		9,200	
	Bottom	12,450	11,550		11,800	
July 13	Surface	2,650	1,800		1,850	
9:50AM	Mid-depth	9,650	6,850		4,650	
	Bottom	10,500	9,200		9,150	
July 14	Surface	1,650	1,300		950	
10:20AM	Mid-depth	7,550	8,100		6,050	
	Bottom	10,700	9,950		9,350	
July 15	Surface	800	580		420	
11:05AM	Mid-depth	8,800	5,000		2,950	
	Bottom	9,750	8,900		8,450	
July 16	Surface	1,350	950		850	
11:50AM	Mid-depth	11,200	7,650		9,800	
	Bottom	11,850	10,250		11,050	
July 17	Surface	3,100	1,950		1,550	
12:20PM	Mid-depth	11,950	10,900		9,200	
	Bottom	12,150	11,100		11,600	
July 18	Surface	5,550	6,750		4,950	
1:05PM	Mid-depth	13,400	8,750		12,100	
	Bottom	13,750	12,250		12,850	
July 19	Surface	3,950	2,550		1,850	
2:05PM	Mid-depth	12,450	9,200		10,450	
	Bottom	13,000	12,050		12,500	
July 20	Surface	750	2,250		390	
2:50PM	Mid-depth	12,200	10,950		9,800	
	Bottom	12,700	11,550		11,900	
July 22	Surface	23	19		18	
4:35PM	Mid-depth	85	20		18	
	Bottom	5,400	95		133	
July 25	Surface	9	4		5	
7:20AM	Mid-depth	4	6		6	
	Bottom	5	6		14	

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations				
		8	9	10	11	12
1938						
July 26 8:30AM	Surface				6	
	Mid-depth				20	
	Bottom				46	
July 27 8:30AM	Surface	7	8		5	
	Mid-depth	8	9		9	
	Bottom	12	9		25	
July 28 9:50AM	Surface	31	26		16	
	Mid-depth	440	28		18	
	Bottom	2,212	26		19	
July 29 10:35AM	Surface	69	35		32	
	Mid-depth	4,850	34		32	
	Bottom	8,300	36		40	
July 30 11:20AM	Surface	28	52		27	
	Mid-depth	1,500	32		40	
	Bottom	5,600	34		39	
July 31 12:20PM	Surface	4	20		10	
	Mid-depth	5	5		10	
	Bottom	6	14		37	
Aug. 1 1:20PM	Surface	7	7		11	
	Mid-depth	13	7		8	
	Bottom	8	8		48	
Aug. 2 2:30PM	Surface	15	11		9	
	Mid-depth	3,350	9		18	
	Bottom	7,450	11		34	
Aug. 3 3:20PM	Surface	85	29		24	
	Mid-depth	10,300	4,050		940	
	Bottom	11,300	10,150		9,650	
Aug. 4 4:20PM	Surface	22	36		150	
	Mid-depth	10,400	4,800		1,620	
	Bottom	11,350	10,250		9,750	
Aug. 5 4:30AM	Surface	7	7		7	
	Mid-depth	14	8		6	
	Bottom	12	42		25	
Aug. 6 6:20AM	Surface		270		11	
	Mid-depth		3,450		3,100	
	Bottom		10,700		10,600	

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Aug. 7 7:05AM	Surface		410		230	
	Mid-depth		9,550		5,500	
	Bottom		9,950		8,800	
Aug. 8 7:20AM	Surface	1,360	1,580		490	
	Mid-depth	10,750	5,050		8,700	
	Bottom	11,300	9,550		9,600	
Aug. 9 8:30AM	Surface				1,890	
	Mid-depth				11,800	
	Bottom				12,850	
Aug. 10 9:05AM	Surface		840		470	
	Mid-depth		5,600		4,200	
	Bottom		10,650		9,600	
Aug. 11 9:20AM	Surface	1,240	1,680		1,180	
	Mid-depth	7,650	6,800		5,750	
	Bottom	8,600	8,250		7,300	
Aug. 13 10:20AM	Surface	2,510	1,300		123	
	Mid-depth	10,250	8,800		2,250	
	Bottom	11,100	9,400		9,300	
Aug. 14 11:05AM	Surface	6,150	1,670		1,670	
	Mid-depth	12,500	8,250		12,000	
	Bottom	13,050	12,000		11,750	
Aug. 16 12:20PM	Surface	2,900	2,000		1,350	
	Mid-depth	12,300	10,750		2,900	
	Bottom	10,000	10,150		12,000	
Aug. 17 1:20PM	Surface	1,950	1,650		1,100	
	Mid-depth	12,600	11,450		9,600	
	Bottom	12,850	12,000		11,900	
Aug. 18 2:20PM	Surface	6,150	3,750		1,350	
	Mid-depth	13,950	8,850		13,400	
	Bottom	14,250	13,600		13,900	
Aug. 19 3:20PM	Surface	3,250	2,800		1,400	
	Mid-depth	11,250	11,950		13,500	
	Bottom	14,450	13,300		13,300	
Aug. 20 4:20PM	Surface	2,250	1,650		1,550	
	Mid-depth	13,000	8,000		10,950	
	Bottom	13,000	12,500		12,400	

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Aug. 21 5:05M.	Surface	2,050	2,800		1,050	
	Mid-depth	11,150	9,200		9,550	
	Bottom	12,150	10,400		11,350	
Aug. 22 6:05M.	Surface	2,800	2,900		1,100	
	Mid-depth	13,050	11,000		8,750	
	Bottom	13,450	11,600		12,150	
Aug. 23 6:50M.	Surface	2,150	2,250		1,200	
	Mid-depth	10,100	7,100		4,050	
	Bottom	11,700	9,900		9,550	
Aug. 25 8:35M.	Surface	3,000	3,500		1,550	
	Mid-depth	12,550	7,500		4,050	
	Bottom	13,450	8,950		8,250	
Aug. 26 9:35M.	Surface	2,900	5,300		2,150	
	Mid-depth	13,100	10,950		8,500	
	Bottom	14,000	12,050		11,600	
Aug. 27 10:20M.	Surface	4,250	4,500		2,250	
	Mid-depth	14,150	11,150		7,800	
	Bottom	14,300	13,100		12,450	
Aug. 28 11:05M.	Surface	1,950	3,500		1,500	
	Mid-depth	6,500	5,950		3,950	
	Bottom	11,200	10,900		7,900	
Aug. 29 12:05PM	Surface	4,450	4,800		2,500	
	Mid-depth	14,400	11,950		9,900	
	Bottom	14,400	13,400		12,750	
Aug. 30 1:05PM	Surface	7,450	6,350		3,100	
	Mid-depth	13,650	12,250		12,800	
	Bottom	14,550	13,200		13,100	
Aug. 31 1:50PM	Surface	3,450	3,200		3,050	
	Mid-depth	11,450	10,750		11,500	
	Bottom	13,250	12,750		12,700	
Sept. 1 2:50PM	Surface	2,350	1,900		1,600	
	Mid-depth	12,100	11,750		10,000	
	Bottom	9,000	11,850		11,350	
Sept. 2 3:50PM	Surface	5,200	4,100		2,900	
	Mid-depth	14,550	14,250		4,250	
	Bottom	15,400	11,000		10,050	

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations 8	9	10	11	12
1938						
Sept. 3 4:50PM	Surface		5,550		3,050	
	Mid-depth		12,000		12,900	
	Bottom		13,300		12,850	
Sept. 4 5:20AM	Surface	2,350	2,500		2,400	
	Mid-depth	11,700	8,300		10,100	
	Bottom	13,500	10,800		11,750	
Sept. 5 6:20AM	Surface	4,250	6,400		500	
	Mid-depth	12,150	7,600		10,800	
	Bottom	13,850	11,200		12,150	
Sept. 6 6:50AM	Surface	6,000	4,750		4,450	
	Mid-depth	11,900	11,050		12,750	
	Bottom	13,400	12,500		12,750	
Sept. 7 7:50AM	Surface	9,450	7,300		6,250	
	Mid-depth	13,450	12,300		12,600	
	Bottom	13,550	12,450		12,800	
Sept. 8 8:35AM	Surface		6,550		9,050	
	Mid-depth		13,000		13,400	
	Bottom		14,400		14,400	
Sept. 9 8:50AM	Surface	8,350	7,000		8,200	
	Mid-depth	10,500	11,150		7,650	
	Bottom	12,400	11,750		11,200	
Sept.10 9:20AM	Surface	8,050	4,850		5,500	
	Mid-depth		11,700		12,450	
	Bottom	10,700	12,500		12,950	
Sept.11 9:50AM	Surface	11,200	9,050		4,100	
	Mid-depth	13,500	10,100		12,350	
	Bottom	13,550	11,800		12,800	
Sept.12 10:20AM	Surface	11,450	8,350		6,000	
	Mid-depth	13,800	12,150		12,850	
	Bottom	15,300	13,100		13,650	
Sept.13 11:20AM	Surface	12,800	10,650		7,650	
	Mid-depth	13,200	13,250		13,150	
	Bottom	14,100	13,300		13,100	
Sept.14 12:05PM	Surface	12,000	11,750		8,950	
	Mid-depth	14,800	12,350		12,000	
	Bottom	11,800	14,350		13,750	

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million — Stations 8	9	10	11	12
1938						
Sept. 15 12:50PM	Surface	3,300	5,450		3,750	
	Mid-depth	13,200	11,800		11,650	
	Bottom	13,600	12,850		12,900	
Sept.16 1:50PM	Surface	2,300	3,100		1,850	
	Mid-depth	13,650	13,000		12,850	
	Bottom	12,900	13,400		13,600	
Sept.17 3:05PM	Surface	8,450	2,300		1,450	
	Mid-depth	13,500	12,750		13,600	
	Bottom	14,050	13,250		13,550	
Sept.19 5:05PM	Surface		940		370	
	Mid-depth		6,650		6,400	
	Bottom		9,150		10,400	
Sept.20 5:50AM	Surface	18	12		19	
	Mid-depth	5,350	19		17	
	Bottom	7,300	81		118	
Sept.21 6:35AM	Surface	8	11		8	
	Mid-depth	6	6		8	
	Bottom	6	14		11	
Sept.22 7:35AM	Surface	10	10		9	
	Mid-depth	11	10		16	
	Bottom	13	11		9	
Sept.23 8:20AM	Surface	8	9		7	
	Mid-depth	15	9		10	
	Bottom	8	11		11	
Sept.24 9:05AM	Surface	6	6		5	
	Mid-depth					
	Bottom					
Sept.25 9:50AM	Surface	10	3		4	
	Mid-depth					
	Bottom					
Sept.26 10:35AM	Surface	4	4		6	
	Mid-depth					
	Bottom					
Sept.27 11:20AM	Surface	3	3		4	
	Mid-depth					
	Bottom					

Table 12 (continued) Tide cycle: 4-5 hours after low tide

Date	Position	Parts per million Stations				
		8	9	10	11	12
1938						
Sept.28 12:05P.M.	Surface	4	5		6	
	Mid-depth	1	14		5	
	Bottom	12	5		9	
Sept.29 1:05P.M.	Surface	7	3		4	
	Mid-depth	6	2		5	
	Bottom	4	4		5	
Sept.30 2:05P.M.	Surface	6	5		6	
	Mid-depth	2,670	8		4	
	Bottom	6,800	150		36	

Bottom Samples from Station 9A taken at or about High tide. Samples taken one minute apart. The majority of these samples fall into Tide Cycle 2, High tide to one hour after; time is given for the first sample.

Parts per million

1937

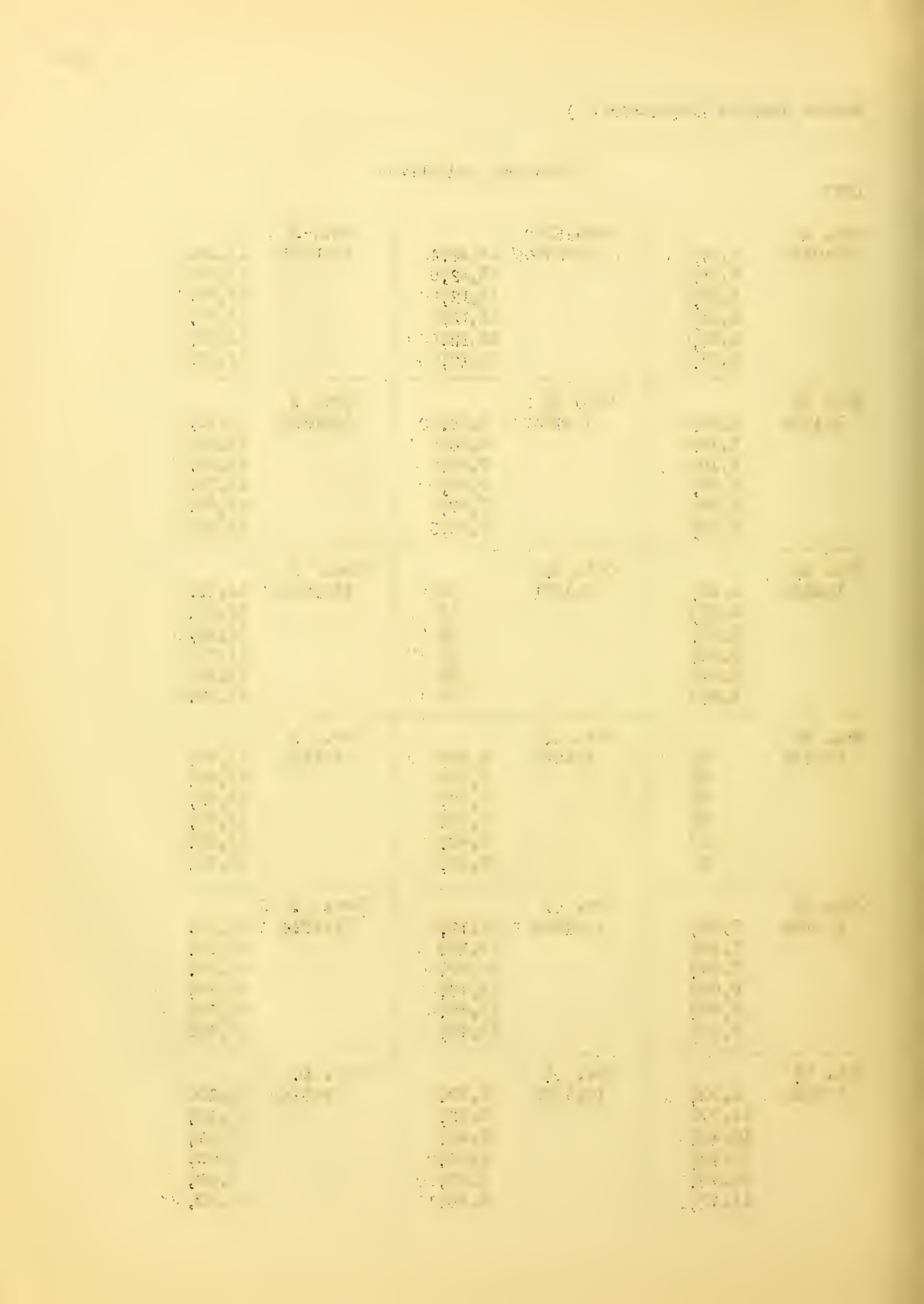
Oct. 1		Oct. 9		Oct. 15	
9:11AM	14,600	2:28AM	13,000	7:37AM	13,900
	14,500		12,600		12,900
	14,700		13,900		14,350
	15,700		14,150		14,000
	15,200		14,250		14,300
	15,500		13,100		13,900
Oct. 2		Oct. 10		Oct. 16	
9:59PM	14,200	2:57AM	14,200	8:25AM	14,400
	15,400		14,900		14,150
	15,300		14,900		13,850
	15,500		15,000		13,900
	15,400		15,100		14,100
	15,400		15,000		13,900
Oct. 3		Oct. 11		Oct. 17	
10:39PM	15,000	3:37AM	15,600	9:19PM	16,100
	14,900		15,500		16,100
	14,900		15,400		16,250
	15,600		15,400		16,150
	15,400		15,600		14,800
	15,400		15,600		15,750
Oct. 4		Oct. 12		Oct. 18	
11:15PM	16,200	4:48AM	14,000	9:56PM	16,500
	16,100		14,100		16,500
	16,300		13,800		16,600
	16,100		13,900		16,600
	16,200		13,800		16,600
	16,200		14,200		16,600
Oct. 6		Oct. 13		Oct. 19	
12:15AM	16,300	5:37AM	10,800	10:43PM	15,700
	15,900		11,400		16,000
	16,000		11,400		15,800
	16,100		11,400		15,400
	16,200		11,000		15,600
	16,000		10,200		15,700
Oct. 7		Oct. 14		Oct. 20	
12:36AM	15,500	6:46AM	14,000	10:55PM	12,500
	15,200		14,100		12,200
	15,400		14,200		13,800
	15,000		14,200		13,300
	14,200		14,000		13,800
	14,800		13,900		13,000

Bottom samples (continued)

Parts per million

1937

Oct. 22		Oct. 28		Nov. 3	
12:06AM	5,600	6:49PM	12,400	11:28PM	11,200
	4,600		12,900		11,900
	4,100		12,800		13,700
	5,600		12,500		13,500
	6,900		12,900		13,700
	6,500		12,300		13,500
Oct. 23		Oct. 29		Nov. 5	
1:19AM	8,900	7:47PM	8,800	12:02AM	13,200
	9,100		6,900		12,900
	8,100		9,700		12,900
	8,700		9,000		13,150
	9,600		7,400		13,400
	9,000		8,300		13,500
Oct. 24		Oct. 30		Nov. 6	
1:48AM	4,200	8:19PM	29	12:58AM	12,500
	2,900		17		12,600
	5,600		23		12,400
	6,400		17		11,500
	3,100		15		12,400
	1,400		15		12,600
Oct. 25		Oct. 31		Nov. 8	
3:12AM	25	9:30PM	6,200	2:14AM	12,600
	25		7,600		12,500
	23		7,800		12,400
	29		8,200		12,600
	27		6,400		12,400
	47		8,400		12,700
Oct. 26		Nov. 1		Nov. 9	
4:11AM	7,450	10:04PM	12,800	2:47AM	10,500
	7,600		13,250		10,600
	7,600		13,400		10,600
	9,000		13,400		10,800
	9,600		12,600		10,600
	8,100		13,000		10,700
Oct. 27		Nov. 2		Nov. 10	
5:38AM	8,900	10:33PM	6,300	3:49AM	10,200
	11,000		5,800		10,000
	10,300		5,400		7,800
	10,800		6,000		9,500
	10,500		5,900		8,000
	11,100		6,100		10,500



Bottom samples (continued)

Parts per million

1937

Nov. 11		Nov. 17		Nov. 24	
4:38AM	13,000	10:01PM	15	3:40AM	11,000
	10,700		16		7,500
	11,000		36		8,700
	11,600		15		8,800
	10,200		11		11,200
	13,000		13		11,600
Nov. 12		Nov. 18		Nov. 25	
6:06PM	14,700	10:58PM	91	5:30PM	12,200
	14,900		119		11,900
	14,600		95		11,500
	14,700		113		11,900
	14,900		129		12,400
	14,400		117		11,700
Nov. 13		Nov. 19		Nov. 26	
7:12PM	15,600	11:49PM	6,700	6:43PM	12,600
	16,100		7,450		12,900
	16,000		7,850		12,750
	16,200		7,000		12,750
	16,000		6,650		12,400
	16,000		8,150		12,700
Nov. 14		Nov. 21		Nov. 27	
7:49PM	11,000	12:57AM	3,500	7:13PM	11,600
	10,800		7,000		11,300
	10,400		11,600		11,600
	11,140		11,300		11,700
	11,100		11,700		12,000
	9,700		11,900		11,400
Nov. 15		Nov. 22		Nov. 28	
8:28PM	9	1:37AM	3,600	8:29PM	8,600
	5		440		7,700
	7		420		7,800
	7		640		8,000
	7		1,150		6,900
	9		4,450		7,300
Nov. 16		Nov. 23		Nov. 29	
9:23PM	6	2:52AM	11,000	9:05PM	9
	6		11,100		5
	5		10,900		9
	6		10,700		7
	5		11,600		7
	7		12,000		5

Bottom samples (continued)

Parts per million

1937

Nov. 30		Dec. 7		Dec. 13	
9:48PM	7	1:21AM	12,700	7:03PM	6,400
	3		12,500		6,650
	5		12,300		7,150
	3		12,800		7,000
	5		12,100		4,750
	5		12,700		4,800
Dec. 1		Dec. 8		Dec. 14	
10:13PM	9	2:22AM	6	7:45PM	5,800
	6		7		4,400
	5		6		3,750
	7		6		6,150
	4		6		6,200
	5		7		6,650
Dec. 2		Dec. 9		Dec. 15	
11:02PM	3	3:20AM	8,900	8:44PM	13,000
	4		7,750		12,700
	3		9,900		13,200
	3		11,100		13,000
	5		9,650		13,100
	3		9,700		13,100
Dec. 3		Dec. 10		Dec. 16	
11:51PM	10,250	3:56PM	7,650	10:08PM	12,900
	9,200		7,100		12,800
	7,300		11,200		12,800
	10,400		7,550		8,700
	7,050		8,450		11,400
	10,400		8,300		12,800
Dec. 5		Dec. 11		Dec. 17	
12:06AM	3,000	5:08PM	11,100	10:27PM	13,000
	2,300		7,300		13,400
	3,000		10,100		13,400
	3,650		9,800		13,600
	3,950		10,900		13,400
	4,500		9,350		13,500
Dec. 6		Dec. 12		Dec. 18	
12:59AM	10,700	5:44PM	9,350	11:29PM	11,100
	10,900		12,350		10,900
	11,000		11,000		9,800
	11,100		9,700		11,500
	8,300		12,250		6,500
	10,800		14,050		11,100

Bottom samples (continued)

Parts per million

1938

June 25		June 29		July 3	
9:11AM	14,600	12:21PM	7,500	4:06PM	15,250
	14,600		4,400		14,650
	14,600		8,250		15,150
	14,650		9,400		15,150
	14,650		8,900		15,250
	14,700		8,600		12,200
June 26		June 30		July 4	
9:56AM	14,500	1:26PM	11,150	5:11PM	15,150
	14,350		11,250		15,450
	14,350		4,700		15,350
	14,450		11,150		15,250
	14,400		11,300		15,250
	14,350		11,100		15,250
June 27		July 1		July 5	
10:51AM	15,700	2:16PM	13,100	6:11PM	14,650
	16,050		13,450		14,600
	15,000		13,450		14,600
	15,550		13,400		14,600
	15,650		13,550		14,650
	15,700		13,500		14,350
June 28		July 2			
11:36PM	14,150	3:31PM	14,050		
	14,000		13,950		
	14,050		13,850		
	8,200		13,850		
	8,050		13,950		
	14,050		14,050		